University of Alberta

Institutional and faculty readiness to change as a response to e-learning

by

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A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Master of Education

in

Instructional Technology

Department of Educational Psychology

University of Alberta

Edmonton, Alberta

Fall 2005

0-494-09084-7

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DEDICATION

This thesis is dedicated to the memory of Dr. Michael Szabo who through his wisdom and encouragement in the early stages of my thesis provided me with the enthusiasm to seek knowledge of organizational change and how people manage change when faced with innovations in the workplace.

ABSTRACT

In the past decade, the merging of educational technology and the Internet has resulted in the adoption of e-learning at many educational institutions. The focus of this case study is to examine the steps taken by the administration at a small college to introduce change as a response to e-learning, the steps taken to support this new initiative, and the attitudes that existed among the administrators and faculty members to support and facilitate the development of distance education.

In-depth interviews were conducted with faculty members and administrators to determine the steps taken to introduce e-learning and to examine the support given to faculty members during this change. Furthermore, the researcher wanted to determine the role faculty members played in the decision-making process surrounding the adoption of e-learning. Of special interest were the strategies used to support faculty members during this time of massive changes in teaching and learning methodologies.

ACKNOWLEDGMENTS

I wish to express my gratitude to the interviewees who gave their time to provide information for this research and who shared their professional views and experiences. Their contributions and support to this research enabled me to complete my work which would not have not been possible or complete without their participation. I also wish to express my gratitude to Dr. David Mappin for his continual support and leadership as my thesis supervisor.

I would also like to thank Donna Lomas, Gretchen Whetham, Pat Pearson, Lil McPail, Janice Edwards, and Raeleen Manjak for the support and friendship they provided me during this research. Their positive attitude and support gave me the incentive to move forward with my work.

I would also like extend a special thank you to my husband, Robert, my son David, my sister, Carmen, and my Mom who have given me continuous encouragement, support, and laughter as my work progressed through to completion and for the strong foundation they have provided me throughout my life.

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CHAPTER 1: INTRODUCTION AND STATEMENT OF PROBLEM

Background of the Problem

Educational institutions in British Columbia are dynamic enterprises that have a mandate to stay current in an educational world that offers ever-changing teaching and learning methods. Ten years after Bates (1995, pp. 242-245) speculated that post-secondary institutions would need to undergo the greatest change to adapt to a new teaching and learning environment, many educational institutions are now offering courses and programs online. In some post-secondary educational institutions in Western Canada, the administration and the faculty have embraced the new educational technologies while others have been reluctant or hesitant to make use of the Internet as a teaching tool and have shown little interest in offering courses, educational programs, and student services through the Internet.

The Internet is a powerful agent of change, and it has become an important tool in the delivery of distance education. As more innovative uses of educational technologies and the Internet are incorporated into current educational delivery, these technologies will deeply affect post-secondary education's goals, plans, strategies, policies, and procedures and may alter our concepts of education (Pajo and Wallace, 2001, p. 71).

Effective use of innovative educational technologies requires that administrators and faculty at universities and colleges learn new teaching methods and strategies to ensure their online students receive the same quality education as those students attending traditional face-to-face classes. As the delivery of distance education through electronic

means is being incorporated into mainstream education and is reshaping the new educational landscape, including to whom and how education is delivered, administrators and instructional staff in educational institutions must re-evaluate their roles and their level of readiness to offer education through new educational media (MacDonald, 2001).

The mid to late 1990s will be remembered as a time when a major educational shift occurred as a result of the introduction of computers and the Internet into the learning environment. This was also a time when the Internet and the development of educational materials helped educators redefine the delivery of distance education which had, until that time, made heavy use of paper-based course delivery (Galusha, 1997). The introduction of new educational delivery methods through the use of new technologies, and more specifically the Internet, has resulted in educators and administrators in universities and colleges having to rethink how courses are delivered. This has meant consideration of who and where the students are but, as well, how faculty adjusts from the traditional delivery methods of lectures and labs in classrooms physically located within educational institutions to a virtual environment with students learning, studying, and communicating from unspecified locations but most likely not from their college or university campus.

First and foremost, educational institutions are being retooled and reorganized to meet the challenges of distance education through the Internet. For instance, educators must re-examine the skills and competencies currently used in traditional delivery with those required for the strategic and emerging technologies (Kapp, 2001). Competition from institutions located within Canada and in foreign countries has meant that geographic convenience or allegiance no longer provide the competitive influence once

held by learning institutions (Graves, 2001). Because the Internet allows the delivery of educational materials from practically anywhere and at any time in the world, the political and geographical barriers that once hampered the movement of knowledge are now being eroded (MacDonald, 2001). This major shift from a once localized- or regional-student population to a more global market has meant that educational institutions must be reorganized by the educational leadership; the institutions' mission, goals, and business strategies to meet the demands of the new market place must be re-evaluate and re-focussed to fit the delivery method offered through the new educational technologies.

When the stakeholders in educational institutions embrace new delivery methods and the disruptive challenges posed by the Internet, the administration and faculty begin the process of incorporating new teaching methods in their course delivery. Although faculty members have always been closely associated with service departments within their institution, today there is a greater linkage and reliance with departments such as the information technology departments, student help desks, and online library services. In a perfect and uncomplicated world, innovations in the field of education would find their way to the faculty level for immediate implementation. However, people are complex; and the way people receive, perceive, react to, and assimilate information and new teaching methods and strategies vary from person to person. All of these human integrations of new concepts and ways of doing business in the educational world seem important in the case of the small two-year college being examined in this research.

Problem Statement

The introduction of innovative technologies in an educational organization affects the institution, its administrators, and its faculty. For change to occur at the institutional level, especially when it clashes with traditional teaching practices developed over centuries, the adoption of new delivery methods to bring education to distance and campus students requires a change in culture and an "aggressive intervention on the part of academic leaders and faculty members" (Bates, 2000, xiii).

It has become clear in the past ten years that computer-based instruction and e-learning have become part of the educational landscape. Given that the college administration at the institution being examined has mandated that web-based course offerings double in the next two years and double again in the next five years, the assumptions are that the administration and faculty will revise the institution's mission, goals, and strategies to align with new technological delivery methods. Furthermore, it is hoped that the institution's goals have been examined and are aligned with student and faculty needs to ensure smooth, continuous, and quality-driven education for students.

In many of today's educational institutions, the administration and faculty tend to prefer a collaborative approach to the decision-making process. The role faculty members play in the decision-making process surrounding change toward e-learning will be examined. The researcher will also examine how the administration has empowered and will continue to empower faculty members to receive formal training in e-learning to enable them to develop quality online courses. And finally, the researcher will look at the ways faculty members are being supported by the technical and service departments involved in the distance education in e-learning and, in particular, how the educational

leadership is promoting and reinforcing quality issues in online courses and programs offered at the institution.

In the yearly information newsletter distributed in paper-form to staff during a scheduled open forum in February 2002, which newsletter was subsequently posted on the institution's website, the educational leadership delivered a clear message that it wanted to double the number of courses delivered by distance learning in two years and to double them again in five years. These measurable educational directives will result in the institution and its staff having to undergo massive changes in terms of teaching and learning strategies, development of appropriate evaluation instruments and guidelines for their administration, program planning, technical support, and collaboration with service departments such as the curriculum development centre and the information technology department.

Research Questions

Given the diversity of people at this small, two-year educational institution, what is the institution's level of readiness, on a broad scale, for change as a response to e-learning, and what attitudes exist among administrators and faculty regarding readiness for change as a response to e-learning?

The research will seek answers to some of the following questions to help determine readiness for change through e-learning at both the administration and faculty levels.

1. Have the institution's mission, goals, and strategies been revised to align with new technological delivery methods? Are they widely published?
2. Is there a formal process for determining e-learning rationale at the institution being researched?

3. To what extent might the institution's goals be seen to be aligned with student and faculty needs?

4. Does the financial plan include budgets for additional faculty professional development?

5. Is faculty empowered to play a key role in the decision-making process surrounding the change toward e-learning?

6. Is the college's technical infrastructure perceived to be designed in such a way that future changes to technology can be easily integrated within the existing infrastructure?

7. Are the institutional leaders' and faculty's attitude such that they may be ready to embrace change?

Significance of the Problem

Educational technology has been a part of the educational delivery system in various forms for many years. Regardless of what is current or emergent in the field, educational technology will continue to have an impact on education, educational institutions, staff, and students.

By analysing how the educational leadership and the faculty members at a small educational institution have managed the introduction of a substantial distance education initiative through the use of educational technology this research should provide strategies to support the launching and development of new initiatives in educational technology which are useful at the college but which others may find resonate with their needs as well.

Of particular interest are the strategies used by senior management to publicize the new educational directives, the attitude of faculty members toward the adoption of a new delivery mode, the educational and technical support offered to instructional staff,

the investment made in purchasing technical resources, and the additional technical training for faculty and technical support staff.

Operational Definition

Attitude toward e-learning refers to an individual's level of readiness to engage in and/or to promote activities leading to the adoption, development, and delivery of online courses.

For the purpose of this study, attitude toward engaging in e-learning is defined in terms of the number of e-learning courses offered by each faculty member. Furthermore, attitude is also described in Collins English Dictionary as "the way a person views something or tends to behave towards it, often in an evaluative way." (Collins English Dictionary, 1992, p. 98).

Definitions of Terms

E-learning. A term covering a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It includes the delivery of content via Internet, intranet/extranet (LAN/WAN), audio-and videotape, satellite broadcast, interactive TV, CD-ROM, and more (Kaplan-Leiserson, 2000).

E-learning is also described as any virtual act or process used to acquire data, information, skills, or knowledge. E-learning is enabled learning, learning in a virtual world where technology merges with human creativity to accelerate and leverage the rapid development and application of deep knowledge (Department of the Navy, 2005) .

In this research, e-learning refers specifically to the use of the Internet as the medium of choice for the delivery of educational products and excludes all other media.

Instructional technology. The theory and practice of design, development, utilization, management, and evaluation of processes and resources for learning (Seels & Richey, 1994).

Professional Development. Professional development for faculty is a personally initiated obligation and right to build discipline expertise, to enhance personal growth, to improve teaching abilities, and to contribute to organizational development.

Profile of the Institution under Study

This small institution has, at present, a faculty membership of 105 full-time faculty members, 7 part-time faculty members, and 24 administrators as reported by the payroll clerk in the Human Resources Department. The Registrar's Office reports that the student population for each year from 1999 to 2004 was as follows:

Enrolment - Full-time Equivalency

Years	Winter	Spring	Summer	Fall
1999	1659	743	152	1637
2000	1602	693	166	1766
2001	1617	802	112	2023
2002	1782	982	220	1976
2003	1888	926	122	2015
2004	1833	690	152	1930

Prior to 2002, there were nine Applied Business Technology online courses, one psychology course, one human kinetics course, some GED courses from 1998 to 2003, and two technical and professional writing courses until 1998 as shown in the e-learning specialist's records. Except for the Applied Business Technology Program courses that

offered a certificate online, the array of courses available to distance learning students was not helpful to students who may have wanted to select from a wide range of courses and disciplines.

The 2002-2003 Fall and Winter Schedules and the e-learning specialist's records show a total of 21 online courses. The development of some of these courses started in the fall of 2001 and continued until December 2003. These 21 online courses consisted of 2 Adult Basic Education; 11 Administrative Studies courses (2 Career-Tech and 9 Vocational courses); and 8 University Studies courses.

In the 2003-2004 academic year, a total of 41 courses were offered online with most new courses developed by the Business Administration and University Studies staff. As well, during that year, the Health Program also began developing online courses. The make up of the courses is as follows: 2 Adult Basic Education; 17 Administrative Studies; 3 Health, Human, and Family; and 21 University Studies courses.

The 2004-2005 online course listing shows a total of 43 courses. During that year, there was a slight increase as or a decrease of online courses in some departments. The courses offered during that year consisted of 2 Adult Basic Education; 22 Administrative Studies; 2 Health, Human and Family; and 17 University Studies courses.

Finally, in August 2005, the institution's Distance Education webpage shows a total of 58 courses will be offered online in the Fall, Winter, and Spring Semesters for the 2005-2006 academic year. The course list is as follows: 2 Adult Basic Education; 26 Administrative Studies; 10 Health, Human, and Family; 2 Recreation Management; and 18 University Studies courses. The development of at least two other courses is currently in progress.

CHAPTER 2: REVIEW OF THE LITERATURE

In the past decade, many educators have adopted and are making great use of new developments in instructional technology. It is now common for universities and colleges to offer a variety of online courses and programs. Although it may be assumed that organizations and their staff are well prepared for e-learning, it is important to check the level of readiness of both the institutions and the staff before massive changes are initiated by the administration in the delivery methods of their educational products. Bates (2000) indicates that institutions which move into electronic delivery of distance education will need to re-engineer and re-organize themselves. Furthermore, Bates (2000, p. 3) suggests that special attention must be paid to staff training. In support of Bates' argument, Moore (1994, p. 42) speculated that the greatest barriers to distance education "are associated with the organizational change, change of faculty roles, and change in administrative structures" and not, as one might anticipate, with technical infrastructure or educational philosophy. These two elements, institutional reorganization and staff training, find their way into much of the literature both at the secondary school level and at the post-secondary level.

In a conversation with O'Neil, Senge (1995) discusses the difficulties surrounding changes within the educational enterprise. Although Senge addresses the K-12 environment and discusses what a learning organization ought to do, his thoughts can also apply to post-secondary institutions which need to prepare their institutions and staff to move into the highly innovative world of e-learning. In Senge's view, the high level of stratification and fragmentation within learning institutions including boards,

administrators, principals, and teachers as well as the community at large, creates an environment that makes it difficult to implement innovations. From Senge's perspective, significant changes at the institutional level can only occur when staff at various levels work together to implement innovations. One of the ways that educational leaders can begin to implement changes is through getting staff of a similar mindset to begin talking to each other and to begin envisioning how the institution, administrators, and staff members should integrate new ideas. Although getting staff together to define a vision for the educational institution is a good start, the level of readiness for the institution must also include the senior management of the organization. Senge's point centers around change occurring when staff, administrators, and the community at large discuss proposed plans for change within their schools. To attempt change without the necessary discussions and without a visioning exercise might lead the institution to fail in its effort to change (Galagan, 2003).

What is institutional preparedness?

The role the senior management play in the creation and support of e-learning initiatives is critical. Program planning activities that take place within a learning institution are part of a greater management system. Consequently, faculty members who are interested in the implementation of e-learning or any other innovative activity within their institution should analyse their institution's organizational chart, review policies and procedures in order to understand the policy-making process, and enter into discussions with colleagues, chairs, and deans. By doing so, those individuals will be able to assess the institution's awareness, level of interest in e-learning, strategies, funding for e-learning, and general level of preparedness and readiness of the institution. Working

within the administrative framework of the institution will increase the chance of success of proposed new initiatives, increase awareness throughout the institution and, hopefully, direct funds toward the initiative.

Dessler, Starke, and Cyr (2001, pp. 136-137) outline the management planning process of business organizations. Although there are differences between planning for business ventures and planning for educational needs, there are similarities in the planning models (Lerner, 1999). Dessler and al. define the planning process for business and educational organizations with steps including setting organizational objectives, identifying the gap between desired and actual positions, developing plans to achieve the objectives, choosing and implementing the plans, and evaluating planning effectiveness.

Unlike the business model in which employees are told what their duties and tasks are, in the educational world faculty members have a vital role to play in the planning of education and in the direction of the institution. Consequently instructional staff and educational leaders who are planning to offer e-learning courses or want to implement new ways of delivering e-learning courses would do well to get the attention of senior management by presenting well-developed strategic e-learning plans to enable the educational leaders to begin working through the necessary implementation stages. For instance in considering California State University at Northridge, Lerner (1999) suggests that the process of strategic planning must include meaningful dialogue with faculty resulting in the decision makers being better equipped to make decisions in light of the institution's mission, goals, and faculty's vision. She further suggests that this form of consultation is a reflection of 'empowerment in the corporate model' which has served business well. Consequently, when institutional preparedness and readiness are being

assessed, faculty members and educational leaders who have participated in the creation of online education or other educational activities are more likely to be able to assess the level of readiness of the institution.

In a follow up to case studies on the sustainability of distance training, Berge and Kearsley (2003) argue that institutional readiness requires that distance education must be institutionalized within the organization. By this, they propose that the business objectives of the institution must be met and the policies and practices governing distance education must be in place to support those stated objectives. As well, they propose that the senior administrators in educational institutions who engage in the delivery of online courses and programs must establish a corporate identity reflecting the business goals of the institution. In addition, they suggest that all organizational activities surrounding the creation and delivery of distance education be thoroughly reviewed. Finally, they also recommend that once distance education is established, the sustainability of the initiatives must include a systematic approach including the allocation of appropriate funding, staff development, alignment of e-learning with business goals and strategies through revision of policies and procedures, and the infrastructure to support distance training. That is to say, distance education and e-learning initiatives must be viewed as one of the business goals of the organization and must be supported accordingly.

Stages of readiness

To understand the level of readiness to change as a response to e-learning of either an institution or its faculty, it is important that the administration in institutions preparing to adopt innovative educational technologies define and examine the stages that institutions must go through from their first engagement in e-learning through to full

successful integration of e-learning as part of their business plan. Administrators and faculty involved in the development of distance education might benefit from the study and adoption of guiding principles and models that best fit their institution.

Screiber and Berge (1998, pp. 12-15) developed a four-stage model of technological maturity which illustrates the stages of technological capability required by educational institutions to implement distance learning. The four stages of technological maturity and institutional maturity are as follows:

Stage 1: Separate and Sporadic Distance Training. The institution has the capacity to deliver e-learning courses from time to time and supports these sporadic offerings. At this level, the ability of the institution to support distributed learning is limited.

Stage 2: Experienced Distance Training Events. The institution's technological infrastructure supports ongoing delivery of e-learning courses. An interdisciplinary team, representing diverse content expertise, is formed to respond to inquiries and to make recommendations to staff and management. The main strength of this team is its ability to enable collaboration among the various content experts and to guide the institution toward meeting its distance learning goals.

Stage 3: Establishment of Organizational Distance Learning Policy. The educational leaders support online delivery at the institution through policies, procedures, and strategic planning. The selection of appropriate educational technologies is based on a process that is reliable and well known in the institution. Knowledge of and access to various distance delivery media by all stakeholders enhance the ability of the organization to meet its business objectives.

Stage 4: Institutionalization of Distance/Distributed Learning. E-learning is part of the institution's corporate image, is branded, and is embedded in the organization's business plan. Appropriate reviews and assessments of e-learning courses are conducted from an institutional standpoint.

In 2003, Berge and Kearsley published the results of a follow-up survey to assess the stages of technological maturity in institutions as outlined by Schreiber and Berge. The results showed that few institutions were at stage 4, but that it was possible for institutions to achieve some characteristics of two different stages simultaneously. The survey also confirmed that many of the institutions were moving toward Stage 4. Although the Schreiber and Berge's model seems elegant in its broad strokes, it does not deal with smaller details required to bring an institution and its employees to Stage 4.

Another model that brings clarity to the stages of readiness is the model published in 2004 and described as Organizational Readiness by the US Department of the Navy. In this model, the initial step consists of determining the reason for using e-learning over other delivery methods and to determine the strategies to be used to support the stated purpose. In addition in this model, organizational readiness is composed of eight elements that must come together to form a whole: architecture; access; capacity; alliances; alignment; composition; culture; and communication.

Under the US Department of the Navy's model, architecture, by definition, is an orderly arrangement of parts and structures, but it does not concern itself with implementation. The two subsets to this idea of architecture are identification and arrangement. The former is composed of identifying critical questions related to the problem of e-learning and is meant to be an information-gathering exercise. As well,

questions to be investigated address the importance of e-learning for the organization; who and what initiatives will be affected; as well as when and how clients will be affected.

Under the heading Arrangement, stakeholders are identified by category, level of requirement for implementation, and order by which they will be affected. In this highly structured system, stakeholders might be board of director members, the Chief Information Officer, information technology staff, or other individuals responsible for implementation. This exercise leads to a better understanding of the impact e-learning will have on the stakeholders. Ultimately, a team would be selected from the stakeholders to lead the development and adoption phases of e-learning.

The second element, Access, addresses the various technical connectivity and interoperability requirements to ensure full use of e-learning. Normally, the information technology department is in charge of this phase to ensure that the software and hardware requirements are compatible, appropriate, and reliable.

The third factor, Capacity, relates more specifically to the development, deployment, evaluation, feedback reports, and sustainability of the e-learning initiative. As well, under Capacity, an assessment of the current and future technical requirements must be evaluated to ensure the venture does not jeopardize other ongoing projects.

Alliance, the fourth element, refers to relationships that must exist between the stakeholders identified in architecture exercise. More specifically, it is strongly recommended under this model that various departments meet with the information technology department to consider the purpose and vision of the undertaking. The

alliance developed between the various stakeholders will ensure that the goal of developing a superior educational product is achieved.

Alignment, under this model, requires that proper care has been taken to ensure that all staff members involved in the e-learning projects have a clear understanding of their role and responsibilities to prevent staff and department from working at cross-purpose. When e-learning has been properly articulated as a business activity within the strategic process, it is said to be aligned with the organizational objectives.

The sixth element, Composition, refers to the human resources and skills available in the deployment of e-learning. To increase the success of e-learning, an assessment of the skill sets of the e-learning staff and subject matter experts may have to be conducted. One of the factors the assessment should examine is the kind of human element the staff would bring to the learning experience. Furthermore, if the organization needs to have a multifaceted curriculum, it may have to invest in the development of additional technical skills for its e-learning staff which skills might include video streaming, graphics, and other visual presentation media.

An understanding of the Culture of the organization, the seventh element, is needed to determine if staff is ready to accept and embrace change. For an e-learning initiative to be successful, the culture should be examined to assess the willingness of staff to learn and to assess if an open environment exists within the organization. When examining the culture of staff, the use of different perspectives is critical since it involves looking at human elements, traits, and characteristics of staff.

And finally, Communication at the organizational level and the corporate attitude towards e-learning will have a significant impact on the adoption of e-learning. The

manner in which the corporate attitude is communicated will also affect how staff will embrace e-learning. A leadership team that shows enthusiasm and knowledge of e-learning will give clear direction to staff that the institution is committed to this delivery mode. To articulate the strategic vision for the institution, the senior leadership and stakeholders must understand the topic and be prepared to engage in discussion with all levels of the institution. If senior management does not embrace or does not show enthusiasm for e-learning, there is a risk that staff will not be fully supportive which could jeopardize the entire venture. It is suggested that the leadership's attitude be facilitative in nature to encourage the adoption of e-learning. Ways that will facilitate the adoption of e-learning are a familiarity with technology, a desire to learn, an understanding of the subject matter, personal and professional benefits for staff, and the creation and existence of a support structure.

Bates (2000) approaches the implementation of educational technologies in universities and colleges from the standpoint of restructuring the organization to fit into the knowledge-based and service industries. Bates's views of change in the educational world are clearly situated within the social context of student needs, faculty role and responsibilities, and corporate leadership. In his view, educational institutions are well equipped to adopt a postindustrial, post-Fordist structure as opposed to the preindustrial or agrarian organizations. In an agrarian model, the educational model is based on eight months of class with summer breaks allowing students to return home for the summer harvest. As well, under the agrarian university model, teaching "remains based on an apprenticeship model of handing down knowledge and teaching methods from one generation to the next" (Bates, 2000, p. 39). Another characteristic of this model which is

still prevalent in today's educational institutions puts the teacher at the centre of the educational system by allowing teachers to select the course content and the method of delivery as well as the creation of the assessment materials. Despite a traditional organizational structure and in contrast to the agrarian model, post-Fordist organizations have strong leaders who have articulated an institutional vision; are able to change and deploy development quickly; have a highly creative, educated staff who can implement new ways of doing business, if they wish; make heavy use of information technologies; are branded; and finally, operate in the global market. Bates suggests that the University of Phoenix; the National Technology University at Boulder; the Nova South-Eastern University in Florida; and the Western Governors' University exhibit some elements of post-Fordist educational institutions (p. 41).

According to Bates, in all organizations where technology had been successfully adopted, leadership of the highest quality was a critical factor. He also suggests that the cultural change brought about by the adoption of new teaching methods requires an effective leadership with a collective approach by the whole senior management team who must share a common vision.

At the teaching level, Bates suggests that departments undergo visioning exercises and enter into continuous strategic planning processes (p. 51). Factors pushing colleges and universities to incorporate e-learning into the educational environment include an increase in the student population while institutions experience a decrease in funding, the need for workers to become lifelong learners and to re-educate to higher standards, and the economic survival of information-based industries whose employees are currently in employed in that field.

Faculty Readiness

The advancement of distance education technologies has created conditions that require faculty members to adopt and apply new and innovative teaching techniques and to use technology to deliver instruction. Furthermore, instructional faculty will need to receive training to expand their communications skills to successfully reach their off-campus learners (Rockwell, Schauer, Fritz, and Marx, 1999). Although these may appear to be easy tasks to perform, there are rewards and barriers to faculty learning new teaching techniques and to using innovative technologies. Among the rewards cited in Rockwell and al. are the application of new teaching techniques, providing innovative instruction, faculty and peer recognition of innovative work, and professional growth.

Barriers mentioned in the research are time requirements, lack of technical knowledge, and lack of support (Galusha, 1997; Muilenburg and Berge, 2001; O'Quinn and Corry, 2002; Pajo and Wallace, 2001; Rockwell, Schauer, Fritz, and Marx, 1999). Other studies reveal that philosophical, andragogical, and cultural barriers also impede the adoption, and effectively, faculty's preparedness to change through e-learning (Berge, Muilenburg, Lin and VanHaneghan, 2002; Jones, Lindner, Murphy, & Dooley, 2002). It is important to note that the Berge and Muilenburg results also indicate that the intensity of the barriers lessen in organizations at the highest level of technological preparedness and institutional readiness to offer online educational programs.

Pajo and Wallace (2001) identified time as a major issue; that is, time to learn the use of the technology, time and effort to develop courses, and time required to using and monitoring. Also at the top of the barriers identified in this research were lack of training, poor technical support, and lack of resources (pp. 78-80).

To counteract issues faced by faculty, Fender (2001) suggests that online instructional faculty need to develop new teaching strategies for the Web, receive training in current delivery technologies, and receive additional training in communications to enable them to be as much at ease with their off-campus students as they are with their traditional face-to-face students.

Other barriers to the adoption of new technologies are embedded in the traditional structure of educational institutions, their norms, and the academic culture which "creates faculty resistance to change, technological or otherwise" (Olcott and Schmidt, 2000, p. 261). They suggest the practices that may impede or block change at the faculty level are that faculty members have control of the curricula and play a critical role on policy committees, promotion, workload, and productivity issues which could lead to different working conditions and a change from the traditional face-to-face classroom to new delivery methods (p. 261). Olcott and Schmidt cite three beliefs that preclude faculty members from adopting innovative technologies. First, there is a belief that technology will, in some ways, change the long-standing practice of faculty members determining their role within the institution and within the classroom. As well, there is a fear that technology-based instruction is not as effective as traditional delivery. Secondly, faculty members worry that support services will not be provided or ongoing, especially in light of rapid technological changes. And finally, the loss of faculty jobs is a concern to many faculty members who fear they may be replaced as a result of the adoption of technology (p. 262).

When redefining faculty policies and practices, Olcott and Schmidt (2000, p. 272) also suggest that rewards are critical for the adoption of new instructional technologies.

They suggest that institutions must provide their faculty with training in instructional theory and teaching methodology as well as ongoing technical training. In terms of tenure and employment criteria, they suggest that faculty members who make good use of educational technology, teach online, and design content that is appropriate for their courses should be recognized for their efforts when promotions are being handed out. Olcott and Schmidt also view release time and continuous training in the use of technology for the development of appropriate course materials and assessments as useful rewards for faculty members (p. 273).

Established educational institutions planning to implement a new vision in terms of adopting innovative technologies to deliver education face a number of challenges. Paul (2003, p. 78) suggests that "faculty have not been trained as educators and are likely to teach the way they were taught in university". As well, he also indicates that institutions tend to reward faculty members who research rather than those who explore the use of new models of learning and teaching (p. 78). Haughey (2003, p. 60) also supports the reward system and suggests that institutions should create "a reward culture for open and flexible learning". As well, she favours "a shift in organizational and academic cultures" to support transformation in the faculty and academic cultures (p. 60). In terms of rewards, she suggests that institutions should "publicize the change and celebrate the success" (p. 61).

Another source suggests that for faculty members to become engaged in the use of technology, the use of technology must be linked to the notion that it is closely tied to teaching and learning. Without this link to faculty's primary role and student learning,

resistance and anxiety by faculty members will increase as technology will be perceived as an added burden (Lim, 2000, p. 244).

In their teacher-oriented model, Ansah and Johnson (2003) outline seven stages educators considering adopting a new delivery mode must go through from mere awareness to adoption and acceptance of educational technology as a teaching tool. These stages describe the various stages experienced by faculty members as they explore and finally adopt educational technology as a delivery mode.

Stage 0 is simply an awareness of new technology-based innovations.

Stage 1 refers to the Information Stage best described as the instructional staff seeking information on the topic.

Stage 2 is the Personal Stage reflected in the faculty member's concerns about how the new technology will affect him/her.

Stage 3 The Management Stage is best expressed in the faculty member's concern about the amount of time required to prepare a course using web technology.

Stage 4 At this stage, the Consequences Stage, the faculty member's concerns are about how technology and the delivery method will affect students. It should be noted that at Stages 4 and 5, the faculty member is concerned with the impact of technology.

Stage 5, the Collaboration Stage, indicates faculty member is concerned with relating their work with other faculty members and their work.

Stage 6, the Refocusing Stage, expresses the faculty member's maturity of thought in the creation of technology-based courses as he/she can now visualize new and improved ways of developing courses.

This suggests that administrators must consider letting instructional faculty go through all seven stages of adoption when innovative educational technology is introduced at the institution. Administrators must also be aware that there may be an "Implementation Dip" where the conditions may disintegrate before they begin to improve which is considered normal when faculty members are in the process of adopting new ways of teaching.

Although there are many more models to guide administrators and faculty once the decision has been made to adopt educational technology, it is critical that both faculty members and administrators work together to select a model that will be a good fit for their institution during their transition to a new delivery mode.

CHAPTER 3: METHOD

Purpose of the Research

As discussed in the introductory chapter, the purpose of this research is to determine the level of preparedness and readiness of an institution and its faculty to change as a response to e-learning and to develop an understanding of the attitudes that exist among its administrators and its staff members to meet the changing educational environment.

This chapter describes and reports on the methodology, the sampling technique, the participants in the research, the research method used to carry out the research, and finally, the process used to interview the participants and to analyze the data.

Case Study Methodology

Educational institutions are vibrant, complex organizations peopled by individuals who contribute in numerous ways to the growth of the organizations. The case study method of research was selected to encourage participants to relate their personal experiences through interviews and to thus contextualize their lived educational experiences. Merriam and Simpson (1995, p. 108) describe a case study as "an intensive description and analysis of a phenomenon," while Patton (2001, p. 447) describes the purpose of case study as a method to "gather comprehensive, systematic, and in-depth information."

Through the use of the case study method, I had hoped the participants would be able to provide rich information on the institution and the impact of new technologies on staff and on the institution's mission, goals, and strategies. I was also interested in understanding the lived experiences of administrators and faculty members given that the

administrators at the institution being researched increased the education goal to offer additional online courses. In addition, I also wished to look into how senior management and instructional staff managed the introduction of higher expectations of its distance learning initiatives and the delivery of distance education through electronic means. When necessary, I examined documents, correspondence, and records of the institution.

Sampling Technique

A purposeful sampling technique was used because the sample size was small and certain individuals were critically important to the data collection. Through this technique, the researcher wanted "to develop a deeper understanding of the phenomena being studied" (Gall, Gall, and Borg, 2003, p. 165). According to Gall et al., one of the goals of purposeful sampling is to "select cases that are likely to be 'information-rich' with respect to the purposes of the study" (p. 165). The purpose of this approach to sampling was not to achieve validity but to provide a way for the researcher to have an in-depth understanding of the individuals and the institution being researched (Gall et al., p. 166).

Participants

The potential participants were selected based on their involvement with e-learning and their knowledge of the institution. I also considered their ability to articulate faculty and institutional needs and their knowledge of the institution's distance education initiatives.

The staff I was interested in interviewing for this research were administrators, staff members delivering online courses, and one staff member who was not involved in e-learning. To insure a good cross section and representation of the instructional faculty,

the four faculty members invited to participate in the research are from four different disciplines and departments. Two of the participants teach in two different vocational programs, and two participants teach in university transfers programs.

I personally contacted the potential participants first by telephone to invite them to participate in the research project and to assess their interest in participating. Of the seven people who were contacted, six agreed to participate and one declined due to family health issues. Subsequently, each participant was advised by email and by paper-based memos of the scope of the research. All interviews were conducted within eight weeks of the initial contact, and participation in this research was on a voluntary basis (Appendix A).

Administrators. The administrators who were interviewed consisted of two deans. These two individuals were chosen because of their role on the executive committee and on the program planning committee. As well, their involvement in promoting the development and use of online delivery by faculty members made them good candidates for this research. For the purpose of this study, the administrators are referred to as Sophie and Meredith in this document.

At the institution being surveyed, there are no other executive positions between the deans and the faculty. It is hoped that the interviews with senior administrators will give a good understanding of their views of e-learning, the financial and technical support the institution will offer to support e-learning initiatives, and what future plans are envisioned for the institution's online delivery.

Faculty – Online. Of the instructional staff members who offer online courses, three individuals were interviewed. These instructors were chosen from three different

departments to give the widest possible representation within the instructional staff. The instructors selected as participants were full-time staff whose teaching load included the development, delivery, and maintenance of online courses in the previous two years. For the purpose of this study, the names assigned to these on-campus and online instructors are Alanna, Emma, and James.

Faculty – Classroom-based instructor. One faculty member who teaches only in face-to-face classes was interviewed. This faculty member does not have any online courses, nor is she required to develop online courses for her program. This faculty member, referred to as Rebecca in this study, was chosen to voice her preference for the traditional classroom.

Researcher. As a faculty member of the Applied Business Technology program that uses both online and traditional delivery, I declare my own bias toward online delivery as I develop and teach online courses as part of my regular instructional workload. In addition, I am a department head and a member of the Faculty Association who will remain a faculty person during the completion of this research.

Research Method

The participants were interviewed during the spring 2004, and all participants were interviewed separately. The interviews were completed within a three-week period.

Three participants were interviewed in the researcher's office during two 45-minutes interview sessions. Two participants were interviewed during one-hour interview sessions in their respective offices. One participant was interviewed once in the researcher's home office during a 90-minute interview session.

All interviews were recorded on audio-cassettes, and the interviews were transcribed by the researcher. After reviewing and commenting on the written transcription of their respective interview, each participant acknowledged in writing that the transcriptions reflected an accurate transcription of his or her respective interview.

Given the size of the institution, the researcher did not run a pilot project to ensure that the type of questions to be presented to the participants remained confidential prior to the interviews.

Guiding Principles

The interviews were designed to discover and explore the attitudes of faculty members and administrators regarding the institution's and faculty members' readiness to change as a response to e-learning. I focussed the questions on topics that would elaborate the participants' views of the institution and its operational goals; how the institution changed through growth and technology; if and how change affected the quality of education; and, generally, how faculty members, and in particular faculty members' attitudes, were ready for change through the introduction, development, and use of online learning courses.

In terms of the institution's level of readiness and preparedness for change, the participants were interviewed about their knowledge and awareness of the institution's mission, goals, strategies, planning, and educational policies. Furthermore, the college's engagement in e-learning initiatives was analyzed to determine if the institution's goals were meeting the targets set by the institution's leadership. Ways in which this post-secondary institution has and is supporting e-learning were also explored to determine the level of commitment of its senior management to support distance education. All

participants were asked the same questions save for four questions that were faculty-specific questions.

Of particular interest to me were the ways in which the institution promotes and reinforces quality issues in its online courses and ways in which the institution supports faculty members through professional development, pedagogical training, workshops, technical training as well as scholarly activities including conferences and participation in educational programs aimed at improving the quality of online teaching.

Ethical considerations

Following the participants' acknowledgment that they would participate in this research project, I sent each participant a Letter of Consent (Appendix A). By signing this Letter of Consent, the participants agreed that their participation was voluntary. As well, the Letter of Consent advised the participants that they could withdraw their consent and could discontinue their involvement in this research at any time without penalty or harm. The participants were also advised that the researcher undertook to maintain the confidentiality of the discussions and that all possible safeguards would be put in place to safeguard the participants' identity. Finally, the Letter of Consent advised the participants that the audio cassettes and the transcripts of the interviews will be kept under lock and key in the researcher's home office for a period of five years after which time the audio cassettes and the transcripts will be destroyed.

The senior instructional officer and the director of Human Resources were contacted about the scope of this study and advised of the proposed topic of research. The college subsequently gave me permission to examine the institution's and the faculty members' readiness to change as a response to e-learning.

Data Analysis

Once the participants had confirmed in writing that the transcripts of their interviews were accurate, I coded all responses and assigned them a topic number. The interviews yielded a total of six topics:

1) **Early Experiences**. Through the participants' recall of their early exploration of the then new delivery method, the participants paint a picture of administrators and faculty members' struggles and determination to reach their regional student population. As well, this section outlines some of the early implementation steps, the investment of financial resources to support faculty and students, and faculty members' role in adopting online distance education at the institution. Documents, reports, and correspondence supporting events surrounding the development of e-learning at the institution were also examined.
2) **Institutional Response.** In this section, a broad overview of how the institution's leadership approached diffusion of its new direction for online learning, attitudes of administration and faculty members to e-learning, and changes to the institution's core business documents are presented.
3) **Readiness to Change.** This section was a difficult one as participants attempted to gauge their own and the institution's readiness and response to change. Policies, rewards, and barriers are also explored in this section.
4) **Technology**. In this section, the participants discussed how technology supported distance education, their use of it, and the resources committed to

technology. Strengths, weaknesses, and keeping current with new technologies are some of the topics covered in this section.

5) **Quality, Course Maintenance, and Champions**. Evaluation, maintenance, and quality of online courses are at the core of this section. The role e-learning champions play is also explored.

6) **Growth and the Future.** Process and rationale for determining e-learning needs, the sustainability of e-learning initiatives, and projected growth of distance educations are the topics covered in this section.

Delimitations

The research project was limited to one small two-year public college and to its administration and its faculty. As well, the research was limited to computer-based instruction for online delivery of courses. In addition, I attempted to explore the level of readiness and preparedness of the institution and its faculty to design, implement, and deliver e-learning courses and programs as part of the institution's regular and on-going course offerings.

The college's satellite campuses were not part of the current research as the majority of distance education and online courses are developed and offered by faculty members working at the main campus.

This study was restricted to examining only one institution and a comparison between this institution and institutions of similar size was not possible.

Limitations

The first limitation of this research is that only a small sample of the faculty members and administrative staff working at the institution was interviewed. It should be noted that the researcher is a proponent of e-learning and brings a bias to the research. The second limitation is that the research was limited to only one of the campuses of the institution. The research was conducted at one small two-year college and will reflect the lived experiences of administrators and faculty members at that institution.

Although the research will be limited to a few individuals in a small college, it is hoped that the results of this research may be helpful to the educational leadership and to faculty members at this institution and at other institutions of similar size who may plan to substantially increase their distance education programs through the use on online learning delivery.

CHAPTER 4:

Introducing E-learning in a Small College

The results of this research will present the story of how a small two-year college and its staff worked through the challenges of introducing a new delivery method, variously referred to as e-learning, online delivery, distance learning, or distance education into what was until that time a very traditional college offering on-campus courses and some video conference delivery. I hope to convey to readers how its management group and the faculty members took steps to enable the introduction of an alternate delivery method. To broaden the understanding of how this introduction of online delivery was handled, I will also take the readers through the processes and activities undertaken at the institution to enable, promote, and sustain the introduction of e-learning. Given the goals, strategies, and steps taken by the administrators and the role and involvement of faculty members, I hope to communicate the state of readiness of the institution and of faculty to change as a response to the introduction of electronic delivery of education materials to serve the institution's student population.

The topics in this chapter emerged from interviews conducted in 2004 and through the examination of some of the institution's documentation affecting the distance learning initiatives. The interview results consist of the participants' descriptions of their lived experiences and their views of the institution being researched with respect to distance education.

To facilitate the reading of this chapter, it is important to remember that the names assigned to the administrators are Meredith and Sophie. The online faculty members are referred to as Alanna, Emma, and James. The faculty member who teaches

solely in the traditional model (face-to-face) is named Rebecca for the purpose of this research.

Early Experiences

When new ideas, concepts, technologies or other innovative methods of doing business are introduced into a workplace, do the stakeholders fully understand the long-term implications or what the unintended consequences might be? In the case under consideration here the introduction of a new method of delivery was introduced for practical reasons, and it was not foreseen that the delivery of the first online course might substantially change the way education was delivered at this institution and how it might change the work of faculty members and support services such as the Information Technology department.

When any untested innovation, such as the delivery of education through the Internet, is first explored by the first users of that innovation, the attitude of staff towards the new approach can be shaped by events that are unrelated to the innovation itself. In this case, the closure of vocational programs in regional campuses and the possibility of faculty member layoffs in the University Studies programs played a significant role in shaping the attitude of staff and in promoting the adoption of online delivery. In addition, that the provincial Department of Education created a special agency to explore and support e-learning initiatives at the local and provincial levels most likely had an impact on faculty members who felt they needed to serve their regional students, keep faculty positions, and access the provincial funding available to those who were prepared to explore the new medium.

The institution being studied offered its first online class in 1996. The first online course to be developed was a University Studies course created in part to serve students in post-diploma studies as well as to avoid a possible layoff of faculty members. According to one participant, this first offering of an online program was too ambitious, did not have a well-defined target, and did not have the support in place for students and faculty members that we would anticipate having in place today:

> It assumed that the students coming into the program had already a set of skills acquired through previous education. It wasn't the kind of program that a traditional two-year college would offer, and so that's why it was put online with the idea that it would pull in people from around the province. It would then try to provide a set of research skills that are very much in demand. I don't think the concept was wrong. I just don't think that enough energy and time went into the development of it and in searching out the proper target market and, at that particular time, I also don't think that the college had the resources to implement that kind of online program–you know, a complete program. We hadn't worked through workloads; we hadn't worked through access; we hadn't worked through any kind of built-in support for students. Now I think it can be argued that we have student support that simply didn't exist at that time. So I think it was ambitious of the college, and I don't think it was a bad thing to go and experiment with it. (Sophie, Interview)

Although some might suggest that this first experiment with online delivery was lacking in a number of ways, the experiment did result in some positive outcomes leading to the foundation for future ventures in the delivery of distance education through electronic means. One of the benefits of this early offering of online courses resulted in a new awareness because the staff "started to develop a core (of) skills among faculty members under duress...so it was certainly a stressful situation, but they started to develop a core of skills that certainly the college has benefited from in the long run" (Sophie, Interview). Through this first experience, the administrators and the faculty members benefited from the experience as they acquired knowledge of online instructor

needs, student support, target audience identification, and core skills required by faculty members and technical staff to support online students.

As well, Sloan, another instructor at the college who was not interviewed for this study reported that, during those early days, one University Studies faculty member was motivated, partly out of pure interest, to create an online class to reach students at a distance who he felt were underserved by their regional campus, and partly to test the claim that students from all over the world would register for online classes. Although this instructor was not optimistic at the time that his newly developed online course would attract students from around the world or enough students to enable him to deliver his online class, he did in fact have enough registrants for his first course offering, and he "has enjoyed the online teaching experience each fall since the inception" (Sloan, Email correspondence).

While one might conclude that the first experience in offering online courses might have resulted in the rejection of the online delivery mode as an acceptable mode to reach students, the educational needs of regional students took priority and the staff and the administrators continued to work toward addressing the educational needs of their distance learning students. In the November 1998 Ad-hoc Committee Distributed Learning Report to the Educational Council of the institution, recommendations included the development of terms of reference on distributed learning, the aligning of distributed learning and programs to align with increased access and educational opportunities for students as well as with the objectives identified in the College's Strategic Plan. One of the questions addressed in this report is whether the institution should shift resources from its traditional delivery to online learning to "potentially" increase enrolment.

During 1998 and 1999, a small number of faculty members continued to develop and offer more online courses, especially in the vocational program area. Correspondence between the vocational program instructional staff and the Board's executive secretary indicates that "two faculty members travelled to the regional campuses in June to hold information meetings on distance learning. The program coordinator will be submitting a draft proposal to pursue how the department might incorporate distance learning within the program." Furthermore, the Dean of Instruction and College's Articulation Report to the Board states that one of the vocational business programs had received funds from the institution's Innovation Fund to develop courses for distance delivery. More specifically, the report states that "the program received funds from the Innovation Fund to develop a strategic plan, instructional guidelines, course materials, and a marketing plan to begin offering online delivery of several courses in January 1999." His report also mentions that to support this initiative, two instructors from the vocational business program travelled to a sister college to meet with their online instructors in October 1998. In March 1999, the coordinator of this vocational program presented to senior management a Departmental Plans 1999-2001 document outlining the goal, strategies, actions, expected outcomes, timeline, funding sources, and impact analysis for 1999-2000. The main focus of the document was the implementation of online courses at the regional level which plan is also referred to in the Education Plan 1999-2001. During the interviews, one participant referred to the early research activities conducted by the program staff:

> I was looking back at some of the documentation, and I noticed that you've mentioned that we actually initiated it - we started researching it in 1996 - and so for some reason that period of time, I guess, seems for me that I sort of look at 1998 as being a critical starting point, as the actual

> starting point for the actual development, but we were involved prior to that looking at different models and what was being done out there. (Alanna, Interview)

In February 1999, the senior management prepared a proposal to participate in the Learning-Centred Institutions Colloquium in which they refer to the need to increase number of programs offered through the World Wide Web to improve access for students, assist faculty in incorporating educational technology into instructions, and provide professional development opportunities for faculty members and staff to become trained in the use of technology. There were also external pressures on the institution to explore new delivery model. In the words of one of the administrators,

> There was a lot of pressure. We had actually done some analysis then as we were doing our technical plan, and we also had a survey done on what was happening, certainly in the province, around the country, etc. and looked at it and thought this was the way of the future and wanted to see how the college participate in that…I think there was certainly communications from the college that it was the direction we wanted to go. So there were directions set by the college through educational planning or other documentation and communications and planning within departments…I think there was provincial pressure and provincial coordination. (Meredith, Interview)

At the time, there were few champions and fewer people knowledgeable on the subject of online learning. In one department, faculty members took it upon themselves to learn the learning management software, to visit the campuses to complete an environmental scan and test the market, and to work with campus centre managers and their support staff to ensure the support for distance education students enrolled in online courses was in place as described in departmental correspondence. One program, under some pressure as a result of program closures at regional campuses, started exploring the possibility of offering an entire certificate program. It offered its first online course in the 1999 Winter Semester. The Registrar's records show a total of 17 students registered in

bookkeeping and keyboarding courses, which enrolment was considered a success at the time.

Departmental history. The 1999 to 2001 period was one of continued exploration of online delivery. During the Professional Development sessions held in the 2000 Spring Semester, faculty members in programs such as Business Administration and University Studies who had participated in the presentation of online courses were also beginning to investigate the benefits of online delivery as a way to reach their distance learning students (Alanna, Interview). In retrospect, it would appear that departments have their own history based on their vision and departmental mandate. One factor that encouraged the development and implementation of online delivery was the previously mentioned provincial initiative supported by the Department of Education and coordinated through one central office which actively sought the involvement of public institutions. This provincial agency still serves as a provincial champion for online learning and continues to promote and market online distance education throughout the province.

When discussing why departments being represented in this research elected to go online, faculty members recognized there was a need to serve regional students. The need and willingness of faculty members to reach regional students appears to have lessened some of the tensions and stresses associated with the addition of a new delivery method to what was then a traditional institution. In one department, suggestions to move to distance learning came from the department staff:

> The program coordinator at the time came to have a vision that (online) was the way it was going, and she shared that vision with our program and particularly the dean at the time also supported that vision, and so I think that's primarily what got us going. (Alanna, Interview)

Since this program was already modularized, the program staff found it a natural fit to convert their teaching and learning materials to an online format. In another situation, the faculty member reported that his department had a deep commitment to serving their students in a traditional classroom environment, but he recognized the need to maintain a large student college population which could also be served by online courses. In his view, there was a desire:

> to expand our base in an area with some challenges in terms of the high school population which was one of the drivers for the college to be interested in expanding an online program and for the department to be ready to proceed with it. (James, Interview)

When this faculty member compared his colleagues to other faculty members in other public institutions in the province, he found his colleagues to be more open-minded toward e-learning than most faculty members within the province. In fact, he believes "that compared to other institutions around the province, the faculty at this institution is probably much more open-minded towards developing online courses, and we've probably gone a lot further" (James, Interview). This acceptance of e-learning as a delivery mode eased his department's transition into e-learning.

One faculty member found that her department was already involved in paper-based correspondence education. The development of e-learning materials gave her regional students ease of access to university-level courses and the flexibility to complete their educational goals from their own community:

> We needed to reach students who were in the outlying centres, and after some time, in order to reach them we would have, well, in the old days we travelled. Recently we have had teleconferences, we have had taped lectures, but the courses were offered only if there is a whole class. There would have to be a captive audience like 12 in a cohort…there's dribs and drabs everywhere, and so what we did was to teach the course from the

> corner of our desk, basically correspondence, and even it was getting so that people were sending assignments by email or by fax and all the rest, and so it wasn't that big a jump to go online since we had the course, so the reason we did was to meet the needs of the people in our outlying communities. (Emma, Interview)

In terms of the classroom instructor, she reported that she and her colleagues felt some pressure to go online, to stay current, and to be trendy. She reports that the instructional staff in her department felt that these reasons were not educationally sound. To date, they have not been proactive in moving into online delivery although they may explore this medium in the future:

> I think there is some acknowledgement in the department that face-to-face class is a good way to deliver our courses. I think it was also the notion that we needed to be up to date and that we needed to be doing online offerings because it's trendy in a lot of areas, and we would look like we were being sort of stale and old fashioned if we weren't offering our courses online. (Rebecca, Interview)

Strategic plan, communications, and early implementation strategies. In February 2002, the senior management outlined the institution's strategic plan which included the need to substantially increase the number of courses offered online in the next five years. In a public college document stating the educational priorities and directions of the institution, the administrators stated that one of their goals was to double the number of courses delivered through distance learning in two years and to double this number again in five years. This statement was a defining moment in the institution's educational direction as it clearly indicated to the college staff at the main and regional campuses, and the residents of the region that the institution intended to move aggressively in a systematic and organized manner into offering many more online courses.

To support this direction, also in 2002, the senior management implemented specific strategies listed in departmental action plans and educational priorities directives to support their vision and plans for distance learning for the next five years. Following the February 2002 townhall meeting, the new directive for distance education was published in the college's educational plan and distributed to all college employees:

> We referred to it (e-learning) in our education plan. Where did that come up in the educational plan? We coordinated with each department, at department head meetings, at campus meetings, so that initiative and that statement came from the college as a whole and the college community as a whole. Was everybody in line or in favour of that? I can't speak for the others. I know that was something the college community approved and that plan came through educational council which has representation from all departments. (Meredith, Interview)

In terms of communication of the educational directive to engage in e-learning, the educational plan document was distributed extensively to college staff in all campuses. Every employee received a copy or at minimum had an opportunity to read the educational plan:

> Now, how well was it publicized? Certainly, everybody got a copy of that. Every person had an opportunity to participate in the education plan through a variety of drafts and department meetings, so I think it was communicated and part of that too…. I think there is a lot of communication and principles for distance learning that we established. I think they were important documents for the college, but I think they also helped people understand the principles on how we were going to do distance learning…. We established an agreement which was done in consultation with all of the college community through the education council on how we were going to do distance learning. (Meredith, Interview)

Furthermore, an e-learning team composed of an education specialist, an e-learning specialist (new position created February 2002), and the webmaster was put in place to assist faculty members interested in using online delivery to make a transition from face-to-face delivery to an online format. The team's mandate was to train faculty

members in the art of online delivery and effective pedagogy for online courses. A help desk technical position was also established to support faculty members and online students. The information technology support staff members also received additional training to support online faculty members and their students. The e-learning team still exists today although there has been a change in staff. One of the interviewees reported that senior management saw a need to support faculty members and students resulting in the creation of an e-learning position and a help desk position:

> I think that one of the things that has positioned us, and I think it comes back to your earlier question about resources provided for e-learning, the college was unique, but there's more staff doing e-learning now and that has led to the establishment of an e-learning specialist position. We did that in spite of internal challenges around staffing levels and things like that. We thought it was critical to have that position as well as insuring that we have the technical support. I think that was definitely a wise decision, and we will continue to do that, and I think that helps us with our change. I think those people help faculty and are a change agent force for us. (Meredith, Interview)

Looking back at the early beginning of e-learning at the institution, it is easy to see how the adoption of e-learning became a way to reach regional students given the layoffs faced by faculty members. It is to the credit of the management group that it published its goal for distance education in a very public manner by inviting staff to participate in the decision making process and by initiating discussions at the department level. Overall, the steps taken by the administrators, the resources invested in supporting e-learning through the creations of new positions, and faculty members' willingness to work with the new medium resulted in a well coordinated effort to change the way the business of education was conducted at the institution.

Institutional Response

Change forces people to think and behave differently. Given that the administration at this institution amended the educational strategies of the institution by planning to double the online course offerings in two years and to double them again in five years, some changes at the institution were inevitable. To enable such changes to occur senior management was responsible for providing direction and guidance. They had to articulate their amended vision and deliver their message in such a way that instructional staff, technical and support staff, and every program advisory committee member were well informed of the new direction. This strategy is in keeping with Muilenburg and Berge's theory (2001) which stresses that a shared vision and a strategic plan must be developed by stakeholders involved in the institution's e-learning initiatives to ensure the implementation of the distance learning program is rapid and free of bureaucratic obstacles.

As a result of the introduction of e-learning, the staff could anticipate a shift in norms, structures, and processes. In support of Muilenburg and Berge's argument, Hanna (2000, p. 28) states that "the success of these change processes depend both on the organization's ability to undergo a significant shift in values, vision, and direction and on the ability of stakeholders to understand and accept a new conceptualism of the organization."

During the planning process for increasing the online course offerings, management at the institution being researched needed to pay attention to its mission, goals, and strategies to ensure these were aligned with the new direction and with "its internal capabilities and with the external demands of it environment" (Dessler, Starke,

Cyr, 2001, p. 161). It is important to examine how carefully the management group planned for this new direction and mandate and how it communicated the new directions to the staff and to the regional communities.

Those who adhere to the theories of Muilenberg and Berge (2001), Hanna (2000), and Dessler & al. (2001) will identify the need to investigate the level of response built into the educational institution and the ways in which these supported the goals set around the change to e-learning. In the remainder of this section I report on the comments of both administrator and faculty respondents on a wide range of topics where I considered their opinions on how the institution responded to be important to the case.

Leadership approach and presentation of new directions. The senior management including the president, deans, bursar, and centre managers presented the Service Plan and the Educational Plan to all staff at an open townhall meeting in February 2002. At this meeting, each staff member received a printed copy of both documents. A question-and-answer session followed the presentation of the new directions. Extra copies of the plans were posted throughout the institution and posted on the institution's website until they were replaced in 2004 by newer versions of Educational Plan and the Service Plan. Both plans can also be found on the institution's Intranet which can be accessed by all employees and by those individuals, including the researcher, who receive permission to access the Intranet.

At the department level, the deans instructed their department heads and coordinators to discuss the plans and to create action plans based on the Service Plan and the Educational Plans, which plans are published at the department level and on the Intranet. The individual Department Action Plans, which included actions and timelines

for implementation, were to be created at the department level by faculty members and were to be submitted to senior management within six months of the townhall meeting. Copies of some departmental action plans were made available to the researcher. Furthermore, the Action Plans from each department were also to be presented to and approved by the institution's Educational Council. Although the Service Plan and the Educational Plan were discussed in this public meeting and departments were required to develop their own action plans, the interviews revealed that not all participants were aware of or informed about the college's new directions. When asked if she was aware that the mission, goals, and strategies of the institution had been revised and publicized following the public meeting, one participant replied that "I don't really know. I have no idea on that one. So I don't know if they changed them, and I feel really out of touch. I don't think I could comment on that" (Rebecca, Interview).

Of the six participants, five stated that the institution had revised its mission, goals, and strategies to align with new technology delivery modes and agreed that these had been published. The faculty member who is not involved in online delivery could not comment and was not aware if changes had been made by the institution to its mission and supporting management strategies.

The revisions to the institution's strategies, according to one of the participants, were market driven and confirmed through student surveys. Meredith, one of the participants, stated that the revisions were based on data:

> The feedback had been from students through student surveys … and if they had come back and students felt that it (e-learning) wasn't working for them or the numbers, if the market said that 'no, we're not buying', we would have established different strategies. E-learning has affected our strategies, and I don't know if it's necessarily a mission or part of our

> mission statement, but it encompasses distance learning. (Meredith, Interview)

External pressures driving the leadership of the institution to revise its mission included the push from the Department of Education to have colleges participate in a provincial initiative. Given that e-learning was becoming accepted as a method of delivery at this college, "the institution was selected as one of the original six colleges as part of a provincial initiative" (Sophie, Interview). Internally, the institution's Educational Council, which has representation from all departments "played a prominent role in terms of adopting some strategies with the development of the quality principles" (Sophie, Interview) to guide e-learning projects at the institution. In one department, the college's e-learning strategies were discussed extensively as faculty members had concerns about the resources being expanded, the support for faculty and students, and the results of the regional market analysis of potential students. However, one faculty member pointed out that there were challenges with implementation:

> Our strategic plan tends to be too vague and the implementation strategies…are still too loose that we tend to do things with the masters, we tend to make decisions too quickly, and it's very difficult to get everybody together in order to discuss a conceptual future change. (Emma, Interview)

She also believes that "it might be interesting to formally introduce 'change' to the college constituents, especially the Kanter model with the three by three matrix showing levels of change and what roles various individuals play" (Emma, Interview). She suggested that a guiding document should be developed by each department to support the development and implementation of departmental goals and that "a map of how the strategic plan was done and what documents go into it like an education plan, an action plan, strategic plan service plan" (Emma, Interview).

Description of e-learning at the institution. When asked about how best to describe e-learning at the institution, four of the six respondents stated that the adaptation of face-to-face courses into online courses is viewed as good for the college and for the students.

Two of the interviewees also added that the institution is transforming into a high quality deliverer of online courses. One interviewee separated the faculty membership into those who teach online and those who choose not to, but she felt that the online faculty members "realize that they are reaching students who they otherwise would not have been able to reach. There are still faculty who don't necessarily see it, but I chose to interpret it as the people who are most involved" (Sophie, Interview). The sixth person responded that e-learning "keeps current with teaching and learning development and is progressive" (James, Interview). This faculty member believes that "this institution has staked a claim to becoming an institution that includes an online component and is working within its ability" (James, Interview). However, he fears that the institution is moving too quickly and doing too much without taking the proper care to evaluate its course of action which might prevent the institution from meeting the goals it has set for itself.

Although the classroom faculty member views the adaptation of traditional classes into online courses as good for the college and for the students, she expressed some concerns about the level of commitment to e-learning in her department since there are no clearly defined implementation plans and little discussion on the topic at departmental meetings.

Senior management's attitude towards e-learning. Four of the six participants responded that senior management's attitude towards e-learning was enthusiastic and one responded that, as a group, senior management's attitude was ambivalent. One responded that she felt senior management was uninterested although initially a lot of enthusiasm had been shown by her supervisor. One faculty member suggested that the level of enthusiasm for e-learning may vary among the senior managers but also that their enthusiasm is "demonstrated by the support that is developing for it and the funds that have been provided to a number of programs to develop online courses and some senior management are very enthusiastic" (Emma, Interview).

The faculty members who rated both the senior management and the faculty members' attitude as ambivalent stated that there is:

> excitement about some of the potential, distress about the costs, concerns about whether students success is being achieved and in online courses, concerns about motivation, concerns about testing and evaluation and how it's performed, concerns about workload and the difficulty of developing online courses, concerns about resources, the desire to do it, and balanced against all the challenges of doing it well are where faculty are at. (James, Interview)

The classroom faculty member rated senior management's attitude as enthusiastic and admitted the importance and value of e-learning which is evident through the opportunities presented to her department. In spite of this, she is now sensing that her dean's enthusiasm is waning because e-learning is not working out as expected:

> So there was enthusiasm from our dean about the importance and the value of this, and we need to get onboard and get up to speed, and this is a great opportunity. I'm sensing now that the enthusiasm is waning because it appears to be not doing as well or it's not just working out as well. So I don't know yet whether that's going to dampen the enthusiasm to offer this kind of learning so that we can stay up to speed and be up to date with

> everyone else or whether we're going to actually say 'You know it really isn't working that well'. We're not going to do so much of it, but I think there's not the enthusiasm now that there used to be which I think faculty's concern was probably whether it was ambivalence–I wouldn't say I'm interested–but they were interested in it, but they were concerned about it really. They didn't think this was going to be the answer to our problem, so I think it was kind of encouraging–no I wouldn't say encouraging–but it seemed to me that our dean was perhaps a bit naïve, would be my view, in thinking that this was going to be a really good thing for our department.
>
> They've tried it for a while, and I think our feeling is that it's actually not working out that well, and they're coming back with maybe to the same place where many faculty have been saying, 'You know this isn't really the answer for us necessarily, so I think I'm not interested in pursuing e-learning for our students would be a fairly wide spread, and I don't think it's a lack of interest in terms of we don't feel like it, but it just doesn't make sense for our students. (Rebecca, Interview)

Faculty attitude toward e-learning. The responses by senior management and by faculty members to the question concerning faculty members' attitude to e-learning showed a wide range of opinions. One administrator responded that faculty members' attitude was enthusiastic while the other felt that faculty member's attitude was 'cautious', which category she added to the list of possible answers. Of the two participants who responded "enthusiastic", one reported that there is a growing enthusiasm towards e-learning and that faculty members are "becoming more interested in finding out about it and learning about it, and learning how to do it, and a number are putting more and more courses online" (Alanna, Interview).

Two faculty members responded that faculty members are ambivalent in their attitude to e-learning. One felt that "there is still a lot of discussion within faculty about categories of learners, and that a lot of learners are not suited to online learning" (Emma, Interview).

The classroom faculty member reported that originally there had been some enthusiasm and optimism in her department about e-learning She also mentioned that, at this time, faculty members in her department were not interested in pursuing e-learning for their students and that this attitude was fairly wide spread within the department. She also stressed that it is not because of "a lack of interest in terms of we don't feel like it, but it just doesn't make sense for our students" (Rebecca, Interview). However, she also stated that common sense should prevail:

> Most people would be interested if it made sense. If it doesn't make sense then I, certainly speaking for myself, I would be willing to do it if it seemed to be a sensible kind of thing that was going to enhance student success. Yes, but if it's just so that we can brag about how technologically advanced we are, no. Most people, I think are not, but if it makes sense, but, unfortunately, it seems that in our area a lot of it doesn't make sense, although some modified version could. (Rebecca, Interview)

Core business. All participants agreed that e-learning directly supports the core business of the institution and that it has become an integral part of the institution's business. One participant stated that e-learning is an important element of our delivery of education and will most likely become a norm in how we do business:

> E-learning for us is very, very important because it is the way in which we reach our constituency who aren't able to come to the college…We have a lot to offer students in our encatchment area and outside, but I think that it is just going to become the way of doing business (Alanna, Interview).

The classroom faculty member suggested that e-learning "does support the college's core business as long as it doesn't take away the opportunity for people to have the traditional face-to-face instruction" (Rebecca, Interview). In this department, there are fears that a move to e-learning might result in potential layoffs.

Business plan. The term 'business plan' and its use at this institution appears to be misunderstood by faculty members. All four faculty members as well as the writer

were not aware that the institution's Service Plan is the institution's 'business plan'. One of the participants confirmed that a traditional business plan was in place but that it has now changed to meet new Department of Education needs:

> We did have a business plan that was created a few years ago, probably 1997 or 1998, which talks about targets and things and more business-like about the college, but as things have evolved and we have been required to do different kinds of documents to ensure our accountability with the ministry, the Service Plan is now our business plan. (Meredith, Interview)

Four of the six participants agreed that e-learning has changed the college's business plan and that e-learning is part of the strategic goals. One of the administrators pointed out that e-learning "has definitely changed some of the character of the college, and it's changed who our student population is, and it is part of our goal" (Sophie, Interview). For example, faculty members can no longer think of their students as being solely from the region as the college has had students from Taiwan, Japan, the United States, and other parts of the world. One faculty member believes that college staff is recognizing the efficacy of e-learning and that the institution has developed an online presence which will continue to become stronger. One of the participants mentioned that "the college is demonstrating a commitment to that—an ongoing commitment, and I don't think the commitment has weakened in any way. If anything, I think it's become stronger" (Alanna, Interview).

One faculty member noted that the business plan had not been primarily driven by e-learning but rather by a need by the college to meet its student target population. From his perspective, he is not aware that e-learning has made "a significant dent in the college's business plan. I would say that it's an attempt to meet the educational goals of the region through an alternate delivery method, but it's the same plan" (James,

Interview). He also believes that the business plan had received faculty input at the department level and had been well publicized through townhall meetings, newsletters, and departmental meetings:

> In terms of publicizing, I think the college does do a better job these days of communicating where it's going through townhall meetings and newsletters. The planning as a business plan and our participation in the creation of that plan, I know that information is solicited from all departments in the development of that Service Plan, drafts are sent around for review, so there's a lot of feedback that goes into that document. Now whether that constitutes, I guess at the end of the day, that's input into the business plan or what we choose to call it. (James, Interview)

One of the participants suggested that "our budget may be our business plan and our budget is not shared with us on an equal level" (Emma, Interview). She noted that it is difficult to react to student educational needs based on the budget alone and that to improve our course selection, faculty members need specifics provided by market research.

For the classroom faculty member, the business plan, the action plan, and the strategic goals are seldom discussed at the few meetings held by her department. When this department meets, the staff members:

> spend quite a bit of time talking about how we were going to revise these plans, but then we don't spend much time discussing what we're actually going to do with it, so we spend more time wordsmithing the new goals or changing the goals, but we don't make any references to it later. (Rebecca, Interview)

External and internal pressures to move to e-learning. In terms of the development of the e-learning goal the doubling of online course offerings in two years and again in five years was driven by senior management. As stated in its strategic priorities document, the institution's e-learning goal is clear:

> The number of courses delivered by distance learning each year will double in two years and double again in five years. (Strategic Priorities)

Why did the administration and some faculty members at this institution commit to such a challenging goal? In some departments, the "push to go online came more from the deans and the president level rather than from faculty, but in other departments it came from faculty" (Sophie, Interview), while in some vocational and business programs the push came from faculty members who were keen to move into or continue to be involved in online delivery. Part of the decision to double online courses in two years and to double these again in five years was based on a need to "meet student needs to an extent that we are dealing with access and support that they would otherwise wouldn't have" (Sophie, Interview). Another reason the institution set this target within a five-year period was that it was looking for "a solution to some of its long-term enrolment problems and so that push was more from the ministry level, especially when they started offering us extra ftes (full-time equivalencies)" (Sophie, Interview). One faculty member believes that if "the college has made a real commitment to an online alternative for students who don't have access to face-to-face classes, then it's a positive development for students" (James, Interview).

Alignment of goals with student needs. Both administrators indicated that the institution's goals were aligned with students' goals. Student outcomes and exit surveys conducted regularly by the institution confirm which courses students want and what their needs are. These surveys also confirm that students want flexibility in course delivery and support for students' needs. One faculty member remarked that the student survey results should also be shared with faculty members and not just with the decision-makers:

> If the information was shared a bit more internally – the people making the decisions have that information – but I think for those of us who are involved at the grassroots level, I'm not sure that we have – that the information has come back to us. (Alanna, Interview)

Another faculty member also indicated that she would like more data from the surveys. In this case, the faculty member

> would love to go through all the data you get through the strategic plans and environment scans because in the outlying communities which were mentioning specific items that they would like to have access to…it would be nice if there was information readily available. (Emma, Interview)

This sharing of data with faculty members may assist in insuring that the programs are well aligned with student needs. Yet another faculty member suggested that "if you were to look at what those goals are, and look at the goals of faculty and look at the goals of students…I think there is a strong relationship among them" (Alanna, Interview).

One of the participants strongly believes the students' best learning environment remains the classroom where the relationship between faculty members and students and among students exists. This atmosphere, he felt, is supportive and enhances a student's chances to succeed unlike the online environment which, according to him, can be an impoverished teaching and learning environment:

> I think it's a relatively impoverished environment in that it privileges certain skills; it's a more cerebral environment; it's a more verbal environment in terms of facility with language; it's a more reflective environment. (James, Interview)

Although the classroom faculty member does not presently teach online classes, she believes that she would be open to implementing an online pilot project. The project would have students continue with face-to-face instruction, but online materials would also support the classroom instruction. After some consideration, this instructor believes

that the introduction of some online learning materials may be a good educational compromise but reiterated that online courses alone would not be a desirable mode of instruction for her students. She also suggested that some online classes could benefit from seminars and human interactions. In her view, these seminars or weekend sessions would enable online students to experience the traditional classroom discussions enjoyed by students in time-honoured classroom settings. She concluded by saying that she is "sensing from talking with them that they would be happy to sit in a seminar room with 6–8 people in their discussion" (Rebecca, Interview).

Goals. Are the institution's goals aligned with faculty's goals? In three instances, the participants suggested that it would be difficult for the institution to fully satisfy all faculty members' needs. One faculty member noted that developing for online courses was a "brutal environment because of WebCT's technical environment" (James, Interview). He further stated that online courses "take away many of the cues that help to motivate and generate some performance for students" adding to the difficulty of preparing online learning strategies. One faculty member believes that, at times, "expediency and opportunity end up driving the ship, but all of a sudden you have these deadlines and in a week you have a proposal in for the courses you're putting online" (Emma, Interview). In her view, the deadlines for rationalizing online courses, preparing proposals, and making quick decisions were often too short and the necessary time to go through the environmental scans and other research conducted by the college was not always sufficient.

Branding of the institution. The college has put resources into creating an online e-learning position and identity. The institution's website has, since the late 1990s,

promoted distance learning on its homepage. The institution is recognized by the Department of Education as a supporter of e-learning as the college was selected by the Department of Education "as one of the original six colleges as part of a large provincial initiative" (Sophie, Interview). As can be viewed on the institution's homepage link to online courses, the institution has 58 online courses in the academic and vocational programs. Some of these courses are part of a number of certificates which can be taken entirely online. At the time of writing, the coordinator of the Business Program advised the researcher that the program hopes to have one business diploma online in 2006 through a collaborative initiative with other institutions and through the institution's own efforts. As stated in the college's Education Directions and Priorities published April 13, 2004 and posted on the Intranet, resources will continue to be allocated to support and expand distributed learning opportunities and e-learning services for students. Furthermore, one of the long-term goals highlighted in the 2005-2007 Institutional Service Plan which is also posted on the institution's Intranet is to increase the institution's distance education course offerings by 3% per year for that time period.

Faculty support. Through the e-learning positions at the institution, the e-learning specialists, the technical staff, staff who teach online, and the curriculum development centre staff offer workshops and training sessions to staff interested in e-learning which sessions the researcher attended in 2003, 2004, and 2005. Additionally, the e-learning specialists are also available to support faculty members through specialized workshops when the need arises as mentioned by attendees at the annual workshops attended by the researcher. As well, when the need arises, the e-learning specialists also work on a one-on-one basis with online faculty members who require

additional support. Given that faculty members, technical staff, and e-learning specialists are involved in training sessions, discussion groups, and workshops several days each year, the institution has invested substantial resources into e-learning to ensure faculty members are well informed of new technological developments.

The e-learning specialists also offer formal workshops on educational technology and technical expertise to all faculty members at least twice a year, once during the winter professional development session and once in August which last two sessions were attended by the researcher. As discussed in those sessions, just-in-time training is also available to faculty members during the year. One of the administrators stated that the college support for faculty members has changed over the years and that the support will continue:

> In the early days that wasn't necessarily the case, it was in fact done off the side of the desk, so we will continue to provide support, and we will continue to fund the e-learning specialist positions to provide support. I know for a fact that we have workshops organized for August again. The advantage for faculty coming online now is that they now have a lot of people with a lot expertise. (Sophie, Interview)

To encourage faculty members to enrol in courses that promote best teaching practices in online courses, the Human Resources Department staff post the relevant information on those e-learning courses on the institution's Intranet. To date, funds have been made available to faculty "to attend educational technology conferences like WebCT workshops through our HR Department" (Meredith, Interview).

With the assistance of the staff in the Information Technology department, standards for hardware and software for faculty were established to ensure online faculty members have the necessary technological tools to create, maintain, and teach online courses the standards for which are listed in the Equipment List located in the IT

department. Faculty members have also been encouraged to attend educational technology conferences of their choice. Information on conferences is posted by the professional development coordinator on the Intranet and on the faculty association professional development website. Release time for instructors to build their courses is also in place in the form of one section release per semester per online course and the college "will continue to provide section releases for faculty" (Sophie, Interview). Although the college provides support to its faculty members, one participant felt that he "was underprepared to be a faculty member in an online course when my course started" (James, Interview). He noted that what he needed was a "more coherent orientation…that walked through the thinking of how one structures an online class and that was missing" (James, Interview).

Technical support. The help desk position to support online students and faculty has also been helpful to both instructors and students in dealing with technological problems that may arise. At a 2004 e-learning workshop that I attended, none of the online staff members present reported technology problems for themselves or for their students. The 2003 Online Process Survey shows that students are mostly satisfied with the technical support services with 74% of students reporting that they did not need technical support and 16% indicating that they were able to get the technical support they needed easily while 9% stated that it was not easy to access technical help. Given the size of the institution and the resources, senior administrators believe that they are doing a good job providing technical support to faculty and that "part of our commitment in terms of distance learning to provide resources that we have looked at technologies as far as the desktops" (Meredith, Interview).

Professional development. At present, the Professional Development website shows that each faculty membership receives 20 days of professional development per year to complete educational activities and access to approximately $3,000 for every four-year period to pay for conferences, workshops, and other educational activities.

As well, instructor schedules show that academic and career-technical instructors and course developers receive a one-section release to learn the technical requirements to develop online courses and to have their courses ready for delivery by the end of the semester. As well, one participant commented that faculty members are entitled to "a section release for all the formal construction of courses" (Sophie, Interview). Furthermore, the institution's Intranet displays some of the services provided by the technical staff and the professional staff members in the curriculum development centre are in place to support faculty members' efforts with additional training and one-on-one support. Some of the vocational staff members have received substantial release time from their teaching duties to develop their courses. The course development proposals made available to the researcher show that release time has been supported by the institution's special development funds enabling the hiring of replacement staff to free regular faculty from classroom duties.

The e-learning specialists are required to remain current, and the institution has made it possible for them to attend conferences, workshops, and provincial meetings to ensure they remain current and aware of new or up-coming provincial projects that might affect the college's programs and role at the provincial level. In June of each year, one e-learning specialist attends provincial meetings to discuss provincial issues and to explore new learning management systems as reported at a meeting attended by the researcher.

Although funds have been invested for the professional development of the institution's staff members and equipment purchased for staff to learn new teaching techniques and the use of the technology, one participant felt underprepared to develop and teach online even after taking workshops and attending conferences. This faculty member suggested that what was needed was a more coherent, teacher-focussed orientation to becoming a faculty member trained in designing, developing, and teaching online courses:

> I was underprepared to be a faculty member in an online course when my course started last year. The college, of course, provides professional development time to all faculty, but what we didn't have, or what I didn't have, was some kind of coherent orientation to the preparation of an online classroom. There was this little online course that a lot of us did that was giving us the experience of taking an online class, but we were on the wrong end of the delivery. We needed to be shown or walked through the thinking of how one structures an online class and that was missing. (James, Interview)

This orientation would give instructors the necessary tools to restructure lectures and learning materials in such a way as to enable students to have a deeper understanding of the materials. James' concerns also included the need for strategies to create a social life for his online students that would resemble the social life found in a traditional classroom. His worries extended to the isolation of students through e-learning courses, and "to students sitting in some remote cabin trying to take a two-year business diploma, and all the courses are online, and the student has never been in a post-secondary institution" (James, Interview). To put it simply, the faculty member is interested in learning the technology but would also like to see a stronger emphasis on the andragogical and learning theories of teaching online and would welcome additional workshops on these topics.

The course management software currently in use, WebCT, has become more sophisticated and allows for the use of different teaching and learning strategies. The faculty membership is interested in not only using the teaching tools but in arranging them in such a way that the online classroom situation becomes more dynamic and responsive to students' educational needs. Concerns were expressed about how well an online learning environment serves the students:

> An online classroom struggles on many fronts to be what the students needs… I think it's an impoverished environment in that it privileges certain skills…and it takes away many of the cues that help to motivate and generate some performance for students. (James, Interview)

One faculty member remarked that several online instructors learned many of the required technical and teaching skills on their own without much support from supporting departments or recognition that much time is required both to learn new technologies and to incorporate these new strategies into online courses:

> You hear about what other people are doing in their online courses and so you know you can do some research yourself, try to find out… I mean we certainly don't have enough training sessions to train on how to use the technology even though we hear about it. I put forward a question about something I thought I would like to do in an online course, but again it's not very helpful. (Alanna, Interview)

The learning and introduction of new technological tools into online course materials and the time required to learn the use of the technology requires more time than this faculty member has traditionally received. The literature suggests that it takes longer to develop courses for the web than it does to develop for the traditional classroom (Parker, 2003).

The participant who teaches only in a traditional classroom situation was not aware that the college supported the development of online courses through release time.

The instructors in her program have often developed new teaching materials off the side of their desk along with their other activities and responsibilities:

> In our department, we did offer some distance courses that were paper based, and those courses were put together with no additional funds. We've had a tradition of scrambling around and offering courses in new forms, but not being offered or not asking for, or not getting additional time to prepare them. (Rebecca, Interview)

As a researcher, it was satisfying to see that the institutional response coordinated by the senior management to support the faculty members appears to have been well intentioned and, for the most part, helpful to faculty. Three of the four faculty members interviewed were well aware of how e-learning was being planned and supported by the institution. Unfortunately, the message did not reach everyone since one faculty member was not well informed of some of the incentives available to faculty members who elect to teach online. One area the administration should revisit is the planning of online courses. Special attention should also be paid to which personnel should be involved in the planning of distance education.

Readiness to Change

The topic of change within the institution was a difficult one for the participants and for me. The goals under Readiness to Change were to gauge the state of readiness of the institution and its staff to change as a response to e-learning and the speed at which the changes might happen within the organization to implement and support the development of online learning at this college.

Faculty readiness to change. One of the central questions of the interviews was "Are faculty members ready to change as a response to e-learning?" It was generally agreed by the respondents that most faculty members are ready to change:

> Some departments embrace change better than others…and you can see that in the college because e-learning is not across the college. There's still a large number of programs that have very little e-learning, so I think that faculty in areas where they've been asked to change have responded really well, and many have embraced it and see it as a good thing. (Sophie, Interview)

Some of the barriers to change were the lack of exposure to e-learning on how to transform some elements of traditional courses, theory components for instance, to online delivery. Two of the participants mentioned that faculty members are ready to embrace educational technology and to use it either in their on-campus classes or in developing online courses:

> I think the majority of faculty are ready to embrace educational technology and to use it either in their face-to-face classes or in developing online courses, but I think that…faculty are ready to change…and there's some who may not see the value of it and feel that what they are doing–that it's not relevant or necessary for what they're doing–but I think the majority of faculty is ready to change. (Alanna, Interview)

Although one participant indicated that "the average faculty member is probably prepared to move slowly in the direction of incorporating more technology in the classroom or different technology" (James, Interview), he also stressed that if the college were to stop incorporating some elements of new educational technologies into the classrooms that "faculty would probably still be agitating for the college to move faster in making all the classrooms more technology-enabled classrooms" (James, Interview).

One interviewee mentioned that "generally the faculty are changing, and given time and depending on participation in decision making, they will change more" (Emma, Interview). To date, faculty members have had the right to accept or to refuse to be involved in e-learning as agreed to under the current collective agreement. Being free to choose their delivery method has made faculty members more comfortable with e-

learning than apprehensive of it. The faculty member who teaches solely in a traditional classroom believes that the change to e-learning must be a sensible move with clear benefits to her students. At this point, she stated that such benefits have not been clearly demonstrated to her:

> Most people would be if it made sense. If it doesn't make sense then I certainly, speaking for myself, I would be willing to do it if it seemed to be a sensible kind of thing that was going to enhance student success, yes, but if it's just making, if it's changing in order to be….so that we can brag about how technologically advanced we are, no. Most people I think are not, but if it makes sense but, unfortunately, it seems that in our area a lot of it doesn't make sense, although some modified version could. (Rebecca, Interview)

One respondent believes that inhibiting factors around the adoption of e-learning are "fear and concerns about how you transform some theory knowledge and put that theory online to make it meaningful for students" (Meredith, Interview). She also suggested that instructors' concerns may be a result of their lack of exposure to e-learning strategies and "a little bit of lack of exposure in seeing how it can work" (Meredith, Interview).

Faculty response to change. Three of the six participants responded that after a reasonable time faculty members embrace change, and one responded that they do embrace change. This last respondent based her answer on the history of change at the institution:

> I've been impressed in that it's difficult, but I would say they embrace change because they've changed a lot, and they must embrace change, and they have changed. So my answer to that was--I think that's where I'm having a challenge with you a little bit on that one, how I interpret that, I come back and you've got this 'very enthusiastic'. I don't think they're very enthusiastic about it, but I think they have embraced change. (Meredith, Interview)

Finally, the last respondent answered that faculty members are ready to embrace change after a reasonable time and are willing to go along, but "there's caution and there can be cynicism about change…but my sense is that people I work with are willing to go along with it (change), although they may not be wildly enthusiastic about it" (Rebecca, Interview).

Although some of the responses are positive, there are questions surrounding change that give a slightly different assessment. One of the participants wondered "whether there is an agreement that the change is positive. People are very resistant to embracing change for change's sake, and for some the shift to online learning has that feel" (James, Interview). Another respondent remarked that change is a personal characteristic and that "some people embrace change more easily than others" (Sophie, Interview). Another participant suggested that change has taken place and some staff are now realizing that "the change has been huge, it's been enormous, and I think it has taken time to recognize the value of technology and education, and I think they're coming on board with it" (Alanna, Interview).

Finally, the sixth participant stated that faculty members "give lip service, but continue with business as usual because historically we have been slow to change" (Emma, Interview). Although she considered responding that faculty members embrace change, she indicated that 'embrace' was not the best word to describe the change at the institution since some faculty members tend to drag their heels when asked to change.

Organizational readiness to change. There were a number of differing viewpoints about the question relating to the readiness of the institution to change. Both administrators believe the management group and faculty members have been responding

to change and will continue to do so and are looking forward to changes and to adapting to new technologies as they come on stream. The administrators also mentioned that the institution's student services such as online educational advising, the library, bookstore, and registration that offer services online were well positioned to support online learners. Furthermore, one administrator indicated that there is a future for distance learning at the institution and that there are plans to continue to respond:

> We have responded to e-learning, and I can say that we will continue to respond to e-learning. I don't know when that will end, so even 15 years from now, I could see us still embracing e-learning in new and different ways. I don't know when we will exhaust that, and we might say we're kind of done. It will be very interesting to see because I think what's going to happen too is that our student population will change and so where we think today and where it's going to be in 15 years or 10 years, they may be ready for more things to go online. (Meredith, Interview)

The instructional staff's responses varied dramatically in their assessment of the institution's readiness to change. One staff member believes that more changes are needed at the institutional level to support distance education:

> The institution has been changing on a number of fronts and may be more static on others, so changing in the sense that they have poured a lot of resources into regional centres, online, Internet, and computer labs, and changing in the sense that they've committed to putting adequate computers on faculty desktops, hiring experts, not enough experts, and I think not enough of an active role in the course development, but moving in that direction. (James, Interview)

One participant spoke about the need for the institution to incorporate and strengthen its e-learning strategies to provide access to students who do not have the ability to participate in a course at the main campus or who can't take courses at their regional centre because there isn't a critical mass of students at their campus to justify offering a course. Although this participant believes e-learning can be part of a larger strategy, he believes the college's identity will continue to be bricks and mortar. In his

opinion, the institution serves people who are rooted in a place and that the sociology of the classroom lends itself to better serve students. Given that the institution has a large percentage of students aged 19 to 25, there is a need to provide a social environment for them, and "an online learning environment is sometimes a relatively lonely and sterile place" (James, Interview).

One faculty member stressed that the institution was ready to change but that the administration has a way to go in getting systems in place. To what degree the institution will change remains uncertain. However she also stressed that there is an attitudinal change taking place because "when it comes to attitudinal changes about e-learning, we are ready to change the institution, and the institution as a whole is ready to change as a response" (Alanna, Interview). As well, this faculty member believes that to be highly responsive to change requires an institutional mindset as well as the technological support within the institution in order to position the institution to respond to future challenges, and she believes the institution will respond appropriately.

The classroom staff member responded that some departments have reacted more quickly than others. She also expressed concerns about the resources being applied to supporting e-learning and the ability of her department to get on board:

> Some areas are already reacting to do more of that than others, and I'm probably sounding cynical, but I don't think that my department, I think my department wants to be get on the e-learning bandwagon but without maybe putting many resources towards it, which has unfortunately been kind of a traditional way of doing/offering courses in new forms was to not allocate much support for it, so I don't know in my department that there is much—I just don't know where we're at with it to be quite honest, and I don't see there being a willingness to fund it particularly well and maybe there isn't going to be a willingness to continue with it. I really don't know. (Rebecca, Interview)

In terms of her department, if the college funded the initiative in a way that will support the students and the instructors, she suggested instructors would be more willing to explore and perhaps adopt e-learning. However, she was encouraged to hear "her dean sort of suggest that it (e-learning) has its limitation, and that was a big step because he appeared to not see that as an issue initially, so that was a good sign" (Rebecca, Interview).

One instructor mentioned that faculty members have changed more through the introduction of e-learning than the institution itself has. For the institution, e-learning has meant the addition of one new position to support e-learning, some technical support, and some capital investment to upgrade faculty computers, but she doesn't "think the college has changed very much for e-learning" (Emma, Interview). Faculty members, on the other hand,

> have experienced many challenges. They have struggled to learn new software, reconsidered the specific learning objectives of their courses, reflected on their own teaching styles, and begun to network with faculty in other disciplines who also teach online. Their daily work habits have changed significantly because of their online teaching responsibilities. (Emma, Interview)

She also suggested that e-learning may be promoting change within the institution and that in itself is valuable because currently e-learning is not a major side of the organization and it should be. Presently, in her view, e-learning is viewed as

> just another delivery tool to reach students in our region and that we are missing the opportunity to create a competitive advantage. The college's strategic plan describes e-learning as a strategy to enable the goal of serving a wider audience. In this instance, the institution would do well to consider using e-learning as a leverage to establish a niche for itself. Perhaps this will happen, but I suspect it will be by luck rather than by design. (Emma, Interview)

Speed of change. The responses to how quickly the institution can respond to change produced various answers so, at best, it can be said that overall there is some ambivalence about the ability of the organization to move quickly.

On the positive side, the e-learning positions and the technical support positions were viewed as change agent forces which positions were created "in spite of internal challenges around staffing levels" (Meredith, Interview). One administrator stated that she was

> very proud of the change that we've made…the fact that the faculty really dug in…and that a number of faculty who really stretched and really developed a set of skills on short notice…and that they moved very quickly. (Sophie, Interview)

She also spoke of faculty members who were resistant to e-learning but who have now decided that they like it and want more distance learning. In terms of the college goals, she suggested that faculty members "were willing to take the risk, and I know that some of them are quite happy with it" (Sophie, Interview) and that the college made "decisions to the best interest in the long term for the college and, quite frankly, the students" (Sophie, Interview).

One of the participants spoke about the institution's ability to respond quickly to the Department of Education's request to move forward with online delivery. This person also reported that a number of faculty members have been able to acquire specialized skills very quickly to meet the change in delivery mode. She also mentioned the resources that the college allocated to support e-learning such as faculty release time, the e-learning positions, the new computers, and generally the resources put in to support change, but she also stressed that change would not have happened if faculty members

had not embraced change. She also suggested that faculty members were generally willing to take risks and that some were happy with the changes:

> I don't think that the change could have occurred if the college hadn't put resources in. I think we did, and I think that people saw that, and they saw the new computers and they saw the section release and they saw the e-learning specialist, and they saw the template. So I think that the college did put the resources into it to allow the change, but the change would not have happened had faculty not embraced it for the ones who really became involved. There were brand new people who came on board and who now sort of see e-learning as kind of their favourite environment. (Sophie, Interview)

Another faculty member mentioned that "constitutionally the faculty has at this college a more can-do attitude toward trying new things…and pride themselves on their ability to get along and do more with less" (James, Interview).

One faculty member spoke about the need for faculty members "to have more of a presence on the Internet where people go and see what workshops are happening…to feel part of a group" (Alanna, Interview) in order to increase the speed of change at the institution. This participant spoke about the need for better communications especially in terms of publishing reports on courses under development so that staff in general can see the progress at the institution and be part of a collective enterprise.

Three of the interviewees believe the institution responds very poorly and felt that the institution moves very slowly as it operates on a five-year plan resulting in very expensive projects with slow progress. One of the respondents stated that "we respond very poorly…but my general impression would be that we change very slowly" (Emma, Interview). Part of the problem in her view is that "we have to do our own environment scan, but then who interprets the information?" (Emma, Interview). Finally, one faculty member stated that, given her position and her department, she felt far removed from the

notion of change since e-learning was not generally a topic of discussion in her department.

At the end of this topic, I must conclude that most faculty members are ready to change even though there are barriers to adopting a new teaching method. The surprise to me under this topic was the participants' assessment of faculty members' response to change. Under this topic, the participants question the underlying fears about the adoption of technology. As well, the interviewees felt that faculty members' adoption of technology comes only after a reasonable time and perhaps with not a great deal of enthusiasm, but that many faculty members have nonetheless changed to use technology to deliver their courses. Others felt that faculty members are cautious while others reported they are reluctant to change.

There were more differing viewpoints under the organizational readiness to change which might explain faculty members' ambivalence to change. Under this topic, the participants stated that administrators are pushing for a higher degree of technological integration in the college's services and are ready to continue to move forward with more technology. On the one hand, faculty members' responses indicate that more changes are needed and that there ought to be a strengthening of e-learning strategies; yet some believe the institution is more of a traditional institution.

As in the case of organizational readiness, there is some ambivalence on how the participants view the speed of change at the institution. That the institution created new positions, acquired more equipment, offered specialized training and generally attempted to address faculty needs were viewed as having been done quickly by the administration. Conversely, some participants indicated that the institution responded quickly to the

Department of Education while others spoke about the institution moving too slowly as it operates on a five-year plan. Finally, one faculty member feels removed from the idea of change since e-learning is not a topic of discussion in her department.

Overall, my own conclusions are that the administrators and faculty members have a differing perspective of the institution's and faculty members' readiness to change. This difference may be as a result of each person's involvement in e-learning based on how closely tied each person is to the change, whether they have worked to implement e-learning, how early in the introduction of this medium the faculty member elected to adopt e-learning, and how comfortable each person is with the medium.

Faculty Response and Role

As is often the case in educational institutions, faculty members play a role in the decision-making process of the institution. Through this topic I wanted to discover the role faculty members played in the decision-making process surrounding change towards e-learning and their involvement in policy making at the institution. I also wanted to know how faculty members felt about e-learning and their motivation to develop online courses. Finally, my goal was to examine faculty training in the use of technology to develop online courses and the rewards given to faculty members who become involved in e-learning activities.

Decision-making process. On this topic, the online faculty members and the administrators agreed that faculty members are empowered to make presentations to their respective dean as to which courses they would like to develop for online delivery. To date, the process has been very informal and is often faculty driven.

One faculty member reported that she didn't "think it's a formal policy except that we have formal representation at various levels, but I also think that the culture supports our participation" (Emma, Interview). Furthermore, she believes that the administration and faculty members don't have "a process for change; there's only a process for making decisions" (Emma, Interview):

> Everything we do here is moving us through change so that's why we're always making decisions because we're always evolving. The kind of change we're looking for with e-learning is more like revolutionary change in a way that moves us to another plateau. (Emma, Interview)

One faculty member stated that she wasn't aware that there was a mechanism in place for decision making process, but that "we're invited to share our insights" (Alanna, Interview). Additionally, she also expressed some concerns about the process:

> Things get compartmentalized, and so sometimes we feel a bit isolated from the process, but we certainly over the years have had committees providing guidance and input into those things, and so it's not as if we don't have a voice, but I guess I would like to see us have a stronger voice. (Alanna, Interview)

As well, in her view, the administration and faculty members should adopt a more sharing and collaborative approach where staff could look at each other's courses to share ideas. At present, the sharing of information may occur but doesn't appear to be an ongoing, formal part of online program development:

> Other people have come on board and have things to offer us…there should be a huge amount of sharing that could be happening that doesn't…I think it happens within programs probably within departments, but I'm not sure if it happens inter-departmentally. (Alanna, Interview)

In support of the previous respondent's comments, another faculty member believes that there is a lack of funds to support faculty-initiated proposals and that "the faculty's lack of technical knowledge and the lack of formal processes that put groups of

people together around a design of a course is the concern" (James, Interview). As well, this faculty member suggested that more technical and financial resources were needed to support faculty members after the decisions around the development and offering of e-learning courses have been made. He also remarked that "to be empowered would take a lot more money" (James, Interview).

The classroom faculty member reported that in her department, instructors did not "feel that they are empowered to do much decision making. Period. So, e-learning or other stuff, I think we're feeling fairly unempowered" (Rebecca, Interview). In her experience, she believes that people in her department were quite cautious and that there appeared to be a lack of departmental planning and very little discussion on the topic of e-learning. If faculty members in her department do move towards e-learning, it will be as a result of pressures being applied on the faculty members and most likely not as part of faculty members' decision-making power:

> We've had department meetings a while ago now where the discussion about online learning came up, and it was generally agreed that it doesn't really work very well. It's not really an ideal set up. We probably could reuse our resources to do other things for students, but we are going to go there because we have to. So that was sort of how it worked. (Rebecca, Interview)

Although both administrators were satisfied with the faculty-generated process to push ideas from the faculty level to the management level, one of the administrators spoke about the shift to e-learning that has occurred at the institution which resulted in a core of people who see e-learning as their preferred delivery mode. She "believes that we are now getting to the point where faculty are more empowered to make decisions" (Sophie, Interview) because faculty members recognize that e-learning has now been institutionalized.

Policy. All four faculty members stated that they have been or would want to be involved in future policy regarding e-learning. One individual has had a substantial involvement and would be prepared to continue to be "involved in some strategizing about where we're going with online, or simply with the use of computers in the classroom" (James, Interview). Although this faculty member has some reservation as to the appropriateness of educational technology as a delivery mode, he stated that "there's a lot of work that's been done. It's a discipline. Now we can benefit from the research of others" (James, Interview).

Other participants stated that the management group and the faculty membership should develop and define its e-learning mandate, policies, and procedures before there is more growth in terms of distance learning. One faculty member spoke about her interest in getting involved in a major initiative, for example in international education, but that she should be given full responsibility for the initiative and the release time to properly manage the project.

After some deliberation, the classroom faculty member mentioned that she would want to participate in policy making but that she would need assurances that her students would be well served by the technology. She also felt she would be open to exploring the subject matter, especially in light of a special project presently being offered at the institution. She was excited about "the idea of being involved in activities, informal kinds of activities that could be quite exciting and quite practical for students so I could be very interested in that" (Rebecca, Interview).

Formal training in e-learning. Both administrators stated that faculty members would continue to receive more training in educational technology and that new

e-learning positions have been put in place to support staff members. One administrator stated that training for faculty members is in formal, informal, and just-in-time training provided by the e-learning specialists. From one administrator's perspective, training for faculty members has received a high priority at the institution which training has been accessed by many full-time and part-time faculty members:

> They have in the past, and we will continue to make that a priority, and you used the word 'formal' there, but I think the key again is the e-learning specialists in informal learning and training that goes on through that position to support faculty. (Meredith, Interview)

All three online instructors believe that faculty members training would continue, but each had a different view of the type of training that is required by faculty members. One mentioned that the just-in-time training and the 20% release time were sufficient training for her to put her courses online and that "the hard work came with the first one (online course), but we definitely have to have somebody there to help" (Emma, Interview). Another participant reported that she would like to see more collaboration and cooperation between online faculty members during the spring and summer sessions:

> This time of the year from the end of April right up to the end of August as a hub of activities so that instructors who are interested in online learning, in developing curriculum for online learning, or for teaching online get together to discuss, share, and implement new ideas into their courses. (Alanna, Interview)

Finally, one online instructor indicated that his orientation to WebCT was from a student perspective rather than from an instructional perspective. He had hoped to receive more training on instructional design and a solid orientation to creating an online learning environment for his students. He noted that "what is needed is to orient new faculty towards their faculty role in delivering an online course and that was not available" (James, Interview). As well, he stated "an orientation to the hardware and software from

a faculty perspective, not a student perspective, that's step one, but also orientation to the learning environment" (James, Interview) would be helpful to faculty members.

The classroom faculty member has not received formal training, nor was she aware that the academic and career-technical faculty members receive 20% release time per course to learn the software and to create each online course.

Attitude of the majority of faculty members to e-learning initiatives. Five of the six interviewees responded positively to the question dealing with the attitude of the majority of faculty members to e-learning initiatives with four responding that they consider e-learning to be an important way of delivering education to regional students and is generally viewed as good for the institution and the students. One of those respondents also suggested that "there is a progression and that certainly they are perhaps not the majority, but there is a large number of faculty who are now involved in the planning and design" (Alanna, Interview).

One faculty member also expressed concerns that local students may be accessing online courses instead of the on-campus classes which may be a better fit and a more positive experience for local students. There is a concern that should local students access online classes that there may be a reduction of on-campus traditional classes.

The sixth respondent stated that the majority of faculty members in her department have a fair degree of resistance to educational technology and e-learning in particular. Part of the staff's resistance is based on her colleagues' beliefs that the delivery method is not really an acceptable form of educational delivery for their students. As well, there are "concerns that if we go the e-learning route, we're going to cut back on our options for face to face, so there seems to be a fear for one or the other"

(Rebecca, Interview). As well, based on the history of the department, there are concerns about layoffs if e-learning were to be introduced to the department:

> Our department has lost sections and lost courses over the years, so there's a very real concern that if we're going into another direction, we probably will be cutting back on something that does seem to be working for a lot of students and so that is a big decision. (Rebecca, Interview)

However, she also suggested that there is a willingness to investigate e-learning with the view of converting small sections of her program to an online delivery method which sections have yet to be discussed.

Motivation and reasons to develop online courses. Since online courses were first introduced at the institution, several factors have played a role in the adoption of educational technology by faculty members. When faculty members first began to develop online classes, the motivation to explore online courses was "either a way to expand one's existing workload as a part-time employee or a way to maintain full-time employment in the case of two individuals involved" (Sophie, Interview). As well, this same person suggested that each department has a mandate that may have influenced some individuals to become interested in offering their courses in a distance delivery mode:

> We think of the college as this collective whole, but it's my impression that departments have individual history, and individual vision of their mandate, and certainly the University Studies and to a certain extent the Business department have always felt that they haven't been achieving their mandate since the spring of 1987 because that's when we stopped traveling as instructors and the impact of that was that there was no University Studies or Business courses in any of our region. So when the instructor involved in the psychology course, part of his determination was to kind of reach out, and that was an expression of someone's concerns that he had, because at the same time that he was building that course we did the first video conferencing and then a history course and an English course and so there was an attempt on the part of the departments to try and say "Look, you know, there's a need out there and we're not meeting

> it." So part of the motivation was job security, part of the motivation was pure interest, and part of the motivation was trying to reach a mandate and then for some instructors they had no choice when they were hired, they were hired with the understanding that they would in fact be putting courses online. I mean they had a choice; they could choose not to take the job, but it was built in as part of a position. (Sophie, Interview)

This same individual also believes that there was an issue of skills and that "some people are more adaptable to the online environment than others; some instructors really do not see computers as a component of their style or their interactions with students" (Sophie, Interview). As well, she spoke about other barriers that interfered with faculty members turning to educational technology to deliver their courses:

> There is a philosophical divide out there where there are some instructors who fundamentally do not believe that an online experience is a good educational experience or a good vehicle for education. They fundamentally believe that there has to be interaction in the classroom. And I guess the last point, and again I respect the faculty is – there are some courses and disciplines that just are not at this particular stage in development conducive to an online environment. I think that's changing with technology and also with the way that young people are increasingly interacting on the computer but, nevertheless, I do respect that there are some pedagogies that are not just going to work right now. (Sophie, Interview)

Conversely, another participant elaborated on the external factors which were driving the administration to encourage their faculty members to create more online courses. In this case, the success of one provincial initiative inspired the administration to move into additional development of online courses:

> There was provincial pressure and provincial coordination, and I'm thinking of the ABT project which became, you know, five different names and hats before it evolved into the 'provincial initiative', but I think that was the spark and initiatives that the college had to expand and get into it and so there were provincial initiatives and college initiatives, some might say pressure, but I'll say initiative. (Meredith, Interview)

One faculty member believes that the desire to increase our student population and to increase educational choice "in a region that has a low population that is spread across a big geographical area—a lot of us have probably bought into the idea that this allows classrooms to be created that wouldn't be possible at any one campus" (James, Interview). In one program area, one participant reports that as her program was being discontinued in regional campuses, online delivery of the program became a viable option:

> in those locations but, over time, it seems quite clear to me that people are associating our program with that regional campus and simply seeing it– they're seeing it as an option and the fact that it's being delivered online rather than face to face is how they are able to access it, but I think they see it though as a viable choice. (Alanna, Interview)

Experimentation in new ways to work with students was a factor that drove one faculty member to explore online delivery. He reports that he was eager to experiment and given the acceptance of online delivery at this institution that he "was probably more eager to try something new in a course…and that I haven't heard of the same kind of backlash against going online than what I've heard from colleagues around the province" (James, Interview).

Another faculty member who had had personal experience through taking online courses believes that online delivery was a very effective delivery method and that it worked well for her discipline and teaching area. She also suggested that due to an increase in class size, effective classroom discussions became difficult. Since her own online experience in participating in online classroom discussions had been a successful way of interacting with her classmates, she understood the advantages of using asynchronous discussions to solve the question of classroom discussion in a large class:

> When I was struggling with having discussions in the classroom which is not an issue when you have a class of 12 – 20, but now lately we've had classes of 40, you can't have a class discussion, you have to break it into four discussion groups and then you can only monitor when you are standing by a group, so a more effective use of time is one of the reasons why I thought that might work well online because you could still have the discussions and ask people to do additional research and practice it, and it didn't have to be in the classroom. (Emma, Interview)

As well as solving her classroom discussion problem, this faculty member believes that "asynchronous discussions are all very good because I like to think before I talk, but I think in a learning atmosphere people like to do that; they like to reflect before they actually respond" (Emma, Interview). Another reason that motivated this instructor to offer some of her courses online is her belief that through the online delivery method students have the opportunity to read or review their reading materials before or during the discussion period which enables them:

> to learn the concepts because they have to apply them, and so they actually have to read the material, and they also struggle less with the fact that they have to learn jargon because in the face-to-face classes when we start talking about somebody's locus of control, students say why do I have to know that and whereas if they've been asked to discuss how it affects certain situations, they'll not even ask that question. (Emma, Interview)

This faculty member is also open to using various new technologies such as electronic whiteboards and other digital technologies. She suggested that she would welcome the use of more innovative technologies to support her teaching and her students.

In terms of the classroom faculty member, she has not heard any faculty members protest learning to put courses online but, in her program, faculty members believe that online courses are not the best way to serve their students' needs. She reports that the

reasons are not based on technical difficulties instructors might encounter but that the reasons are pedagogical in nature:

> I haven't heard anybody protest on the basis that they think it would be too difficult to learn how to put a course online. I haven't heard of any resistance based on problems with the instructor putting a course together, although I would admit that probably almost all of them don't know how to do it and would have to learn, but I think people would be willing to do that. I think the issue or the reluctance or the lack of enthusiasm in doing this is that doing this is not the best way for us to support our students. (Rebecca, Interview)

However, she believes that should an opportunity present itself, she is a willing to explore this medium and might consider a short introductory computer activity for her students. She suggested that it would be a good thing for her students

> to be exposed to it so that they can have some successful, even very short experience with it so down the road they might consider it. If they can manage something basic and straight forward, even with their basic computer skills, I think that sets them up to be able to consider that option later. (Rebecca, Interview)

Rewards. Rewards were viewed differently by the various participants. The release time offered to some faculty members was viewed as a reward by some, although the classroom faculty member was not aware of additional release time to create online courses or of "any perks or any kind of thanks, or anything…it's just part of their workload" (Rebecca, Interview). One faculty member and one administrator stated that there were no rewards for developing distance education courses and that the classroom and online instructors were treated equally.

Three participants suggested the rewards were of a more intrinsic nature through recognition of online instructors as an elite group in the college community and through the challenge of learning new skills:

> We don't go for the external motivation. We go for the intrinsic kinds of things. So I think that it is motivating for some faculty to do something new. In some way, we are part of an elite group, so that might be important. I don't think there's any extrinsic reward. (Emma, Interview)

One person also mentioned that the diversification of the workload by going online offered challenges that are new, exciting, and innovative by providing faculty members with personal growth. What one participant would really like to see as a reward is faculty members having access to an internal community of online instructors sharing ideas, techniques, and innovative ways of creating online courses:

> Participatory environment and the collaboration not just within a program, but within a department, I mean at least within a department and then beyond that border, and it may be that educational technology applies right across the board. So it's not limited to any program, any department, all of us can use it in our classroom and staff can use it as well. Recently when our web manager set up those websites for us… a good number of staff were there as well. (Alanna, Interview)

All participants agree there are no additional financial rewards for online instructors and that the technologies faculty members have access to as part of their regular traditional classes or for their online classes are required to enable staff to perform their regular workload. The use of technology is viewed as an ongoing commitment that has been made by the institution to distance education instructors and instructors in traditional classes.

On closer examination of this section, it would appear to me that the administrators and the faculty members are genuinely interested in collaborative and participatory engagement to ensure policies and formal processes are in place to govern the development of additional distance education courses. At present, there is faculty involvement in policy, but it also appears that this involvement could be more widespread across the faculty membership. There is also agreement between the groups that online

training will and should continue, but there is some divergence among faculty members as to the quality and nature of the training. Once again, the notion of collaboration by all online faculty members and the training of faculty members from a pedagogical perspective were viewed as desirable.

Although the original motivating factors that prompted faculty members to explore distance education were aimed at ensuring personal goals such as employment and external factors such as provincial initiatives and funding, the factors now driving faculty members are directed more toward student educational needs. As well, generally speaking, faculty members are open to creating additional online courses because they believe their students can learn through this delivery method. Even though the use of online delivery would be ground-breaking by the classroom instructor, she is ready to explore the use of online delivery for her students.

Technology

Although the technology questions were difficult for some of the respondents, everyone had knowledge of and opinions on the subject since technology is part of everyone's daily professional life.

The technology questions dealt with four separate categories including

1.) The ability to integrate new technologies into the college's current infrastructure,
2.) The capability of staff computers to handle e-learning demands,
3.) The ability to keep current with technological changes, and,
4.) The strengths and weaknesses of the institution's technology to support e-learning.

Institution's ability to integrate new technology. The question related to the integration of technologies was a difficult one for some of the respondents who work with technology on a daily basis but who are not technology mavens. One of the participants suggested that "we have a strong core of people" (Alanna, Interview) in our Technology Department, however, she also suggested that

> they may have reached the point where they have constraints in terms of money, in terms of equipment, and so I think we're at a crux now where we want to carry on do some significant things we're going to need to seek extension of those services. (Alanna, Interview)

One of the administrators stated that the technology department might need additional and ongoing training to keep up with the demands of technology. The second administrator indicated that the administration is continually examining the Information Technology services to ensure these services continue to support the educational needs of students and instructors:

> We're continually looking at the services to ensure that they are integral to the educational planning process when we talk about online learning, and specifically, we talk to Information Technology services about the demands that would be in that area, and that's why we did create the Information Technology position of help desk for students and particularly a major portion of that work is to help students with their technology support but especially for online learning. (Meredith, Interview)

One staff member stated that the integration of technology was smooth and created hardly any disruptions in her traditional class and that, in fact, "when changes have been made, I haven't found it particularly disruptive, but I'm not offering online courses and so from my experience, it's gone smoothly, but I have limited knowledge" (Rebecca, Interview). However, she suggested that the Information Technology department should publicize innovations brought to the college in a more open way to

ensure staff can access the new technological products as they become available. She recommended that the innovations be published on the Intranet.

Another faculty member remarked that the college has stretched its technical infrastructure and that online courses have been developed on "a shoe string without a lot of expertise, certainly without the kind of collaborative team approach to putting a course online with specialists in different components collaborating" (James, Interview). This particular faculty member would like to see a team approach composed of course designer experts, a graphic designer, and a technical expert to support the subject matter expert. The goal of this team would be to exploit the advantages of a web classroom as well as create a dynamic and exciting learning environment for online students:

> I think for me I would be thinking more in terms of the function of someone who is a course designer for online courses…and a graphic designer. Someone who's got some real web design or technical skills to help develop some of the evaluation instruments online. There's an awful lot of busy work that's involved in trying to run a WebCT course and so, I'm not sure that that's the best use of faculty time, and I think that in an ideal world it would be nice to have a model in which each course is a team effort of three or four people who bring different skills, one of them being the content expert. To date, faculty has been doing these courses more themselves, and I think the program may be the exception because there was a team approach to that one, but my understanding is that most faculty have done their own thing to the best of their abilities with minimal support. (James, Interview)

From his perspective, although some technical assistance and pedagogical support are in place, faculty members take a literal approach. In fact, they may become course designer and course developer without the technical and pedagogical support needed to develop high-end quality courses:

> The difficulty for faculty is that they will take a rather literal approach to putting the course online. They will dump materials into a webpage and the real risk is that what you get is a bunch of lecture notes that aren't really adapted to the medium, and a learning environment that is a bad

> attempt to recreate the classroom instead of a good attempt to exploit the advantages of a web classroom. That's not a criticism of faculty, that's a criticism of proceeding with these courses with the approach that, well, the faculty knows the course, let faculty put the course online. (James, Interview)

Hardware and software to handle e-learning In terms of hardware and software, some of the participants agreed that, at the basic level, the computers in instructor offices and the current software products were sufficient to offer online courses which, to date, have been mostly text based with PowerPoint presentations, web links, and more recently online video presentations.

> The institution has been changing on a number of fronts and may be more static on others, so changing in the sense that they have poured a lot of resources into regional centres, online, Internet, and computer labs, and changing in the sense that they've committed to putting adequate computers on faculty desktops, hiring experts, not enough experts, and I think not enough of an active role in the course development, but moving of the direction. (James, Interview)

Another faculty member remarked that "I don't think we are state of the art, but we keep upgrading, and I think that is a good sign" (Alanna, Interview) while another mentioned that "we have relatively the newest technology in our offices, and we upgrade constantly. So I would say ok on that subject" (Emma, Interview).

One faculty member spoke of difficulties experienced by instructors who want to integrate higher levels of technical innovations, such as commercially or college-produced videos, into their WebCT courses. Other educational technologies that were mentioned included video conferencing, teleconferencing online, the use of production software for the purposes of creating in-house productions, but this faculty member

> was not sure how the college's infrastructure would be suited to it…especially because of the platform WebCT which has these constraints and from what I have been told repeated is to keep it simple; keep it as

> simple and as unadorned with tricky technology as possible. (James, Interview)

He felt these questions need to be addressed by the e-learning specialists and the technical staff to enable faculty members to integrate new software into WebCT courses.

On several occasions during the interviews, WebCT was mentioned as a problem area for faculty members. For instance, for science courses and labs to be offered online, additional technical hardware and software and perhaps the adoption of a new learning management system may be needed to supplement our current technology "especially because of the platform WebCT's constraints" (James, Interview).

One administrator elaborated on the need to explore new technologies. Given that distance education is a priority for the institution, there is a willingness to fund new educational technologies:

> Right now I think they are, but if we were to move into some non-traditional areas–I'm thinking science and labs–we would have to do streaming video and that would require more of an investment. The other thing I've noticed is when I look at our courses that we're a lot of text-based courses and we need to start to explore, we've done well to get there, but now we need to get to the next level which is to start to incorporate some of the new technology. That will require us to make more investments, but that's fine, I mean that's something that the college is prepared to do, and we have put a lot of money into distance as a priority. (Sophie, Interview)

Other peripherals mentioned by the staff were better recording devices, faxes, speaker phones, tablets, web cams as well as upgraded software and office computers with additional memory to support multimedia projects for their delivery of online courses. One faculty member noted that "something that might be useful for me in how I deliver my course would be a fax machine in my office or a tablet; other peripherals might vary from instructor to instructor" (Emma, Interview). This additional equipment

would support instructors in the development of their courses and in their ability to increase services to students. Another faculty member spoke about the need to improve peripherals and course management software.

> For example recently I agreed to do an instructor introduction called 'Meet your Instructor' using PowerPoint and I've got voice along with it, and that's when I'm finding out the microphone I have is not recording clearly enough, but here, of course, we don't have Breeze at our college, and I guess that we are fairly limited in what we have. (Alanna, Interview)

One participant suggested that "in an ideal world it would be nice to have a model in which each course is a team effort of three to four people who bring different skills, one of them being the content expert" (James, Interview). This theme is a recurring one that may need to be addressed to encourage other less technically inclined faculty members to consider online delivery.

Keeping up with technology. Are we keeping up with technological changes? Most people believe that senior managers are doing their best to keep up and, that for the most part, when possible, resources have been invested to promote the adoption of new technologies. One respondent stated that "we have relatively the newest technology in our offices, and we upgrade constantly" (Emma, Interview). One faculty member indicated that the technology is not state of the art, but that there is continual upgrading of technology taking place:

> I don't think we are state of the art, but we keep upgrading, and I think that is a good sign. As well, I think some of those new technologies need to be tested. Some of them have not proven to be as useful as we might have thought, and some of them are not as important to learning as we might have thought. So I'm not so sure that we want to be head of the group, but I think, though, that we need to do more in that area. (Alanna, Interview)

In terms of new technologies, one of the administrators indicated that there are many new technologies coming on stream, but the college can't afford to be at the forefront of technological advances. She indicated that "the implementation is part of the strategy. We can't afford to be part of the bleeding edge with some of the new technologies" (Meredith, Interview).

One faculty member suggested that the college would be wise to take the choice of operating system updates out of faculty's hands to ensure all staff proceed from a single platform to enable "the kind of synergies that we would want there to be in being able to work together to borrow and share things and use common tools" (James, Interview). Furthermore, he indicated that WebCT works well if one limits a course to webpages, weblinks, digital photos, and reproducing lecture notes, but otherwise WebCT's environment is incredibly limiting in terms of creating a dynamic learning environment.

Strengths and weaknesses of the college's technology support. Although staff identified various weaknesses in the technology, they also identified a number of strengths. The technical staff members have been identified as a major strength at the institution. However, it was pointed out that additional technical staff would lessen the heavy workload of the technology staff. One participant stressed that "we have a very talented Information Technology staff that really keep our systems running and come in and set up labs that are very complex with lots of different software and hardware. They make it work" (Meredith, Interview).

Another strength of the technology plan has been the addition of the e-learning and help desk positions "where some institutions don't have them. That we have these

positions, I think is a credit to us. It would be nice to have more" (Meredith, Interview). In support of that claim, during the August 2004 e-learning workshops attended by the researcher, several faculty members expressed their satisfaction with the technical and educational support services provided by the e-learning specialists. One faculty member stated that the technical staff listen to faculty members' requests and that they are open to considering the ideas presented to them. That the institution's technology plan is reviewed on a regular basis was also mentioned as a strong point of the ongoing support for e-learning initiatives and as a support for the Information Technology department. Furthermore, that the Information Technology Department is gearing to go wireless at the main campus was also viewed as a step in the right direction and one of the "linchpins for the next stage of encouraging both faculty and students use of the computers and portables or PDAs as part of their programs" (James, Interview).

In terms of weaknesses, one administrator noted that our registration process is complicated. As well, additional educational advisors to provide better service for the students would enhance the services currently available to online students:

> Definitely we don't have enough support staff. We need more support staff, more e-learning specialists or more help desks for students. I mean you could have more staff, and you could do a better job. Our online registration process, for example, has been complicated, and it would be really nice to have more staff. We could use more educational advisors at that point. I mean it would be nice to have that and be able to provide better service because I think more staff could provide better services. So that's definitely a challenge for us, and I think we have concerns. (Meredith, Interview)

One faculty member spoke about faculty members' role in developing online courses. His thoughts were that faculty members are content experts and not computer mavens. In his view, the process of creating online courses is a discipline in itself. He

also noted that the learning management system software used to manage the creation and delivery of online courses is becoming more sophisticated and that faculty would welcome a small team approach to support online faculty:

> We're keeping up to date to some degree. I think the problem is that for faculty as content experts and not as computer mavens, the whole idea of managing an online course is becoming an increasingly involved discipline and the software tools are becoming more and more sophisticated, and it gets to the point where getting the expertise and the tools is a discipline in itself, and it makes it a real dilemma for faculty to either work on their discipline or work on all this software, and again, it's hard to make more resources available in terms of personnel who have these software skills to work with faculty in small teams to develop these courses. (James, Interview)

Bandwidth was identified as an external regional weakness. The institution's regional campuses are available to online students, but usually they prefer the flexibility of working at home at a time of their choice. In terms of the purchase of additional software and hardware, the purchase of additional technologies as well as projected increases in licensing costs for newer versions of the learning management system are a priority as shown in the institution's yearly operating capital.

Although faculty members are supported through an internal process enabling staff to purchase computers for home use at a discounted price, one respondent suggested that additional support was needed. Her suggestions for technological support for online faculty members who work at home could include the college providing those members with printers, paper, ink, and faxes and by supporting the purchase of online time from their Internet service providers. Currently, online instructors who work from home when developing or teaching online courses use their personal supplies and equipment. As well, these instructors use their personal home Internet connection since the college does not

provide home supplies or pay for the cost of home Internet connection for distance education faculty members.

> There is a problem when a faculty is working at home to support e-learning (which to me is one of the benefits of that mode) and you don't need necessarily need an office in the college or an office full time. I'm not sure how to print when I am on the virtual server so I'm going to use my own computer, I'm using my own printer, my own paper, my own ink, and you are paying twice. (Emma, Interview)

One faculty member made several recommendations during the interviews about the improvements that are needed to support online faculty. She indicated that the demonstration and introduction of new technologies take far too long and that faculty members only come into contact with the new technologies when the yearly workshops are offered by the e-learning specialists, during professional development activities, or through personal and professional networks:

> Until we test, we don't know. Until these things are presented to us through other workshops or through the network system that we all have in some form or other, that's really how the technology plan is really evolving. I would like to see something more formal where perhaps every three months to review our tech plan because it's a changing world. (Alanna, Interview)

This participant also recommended that a more systematic and methodical approach to the testing of new technologies. Furthermore, she felt that a planned approach to informing faculty members of the technological innovations as they are brought into or explored by the Information Technology staff and the e-learning specialists would be welcomed:

> There is really very little time to test new software. It's kind of like on the run, on the fly, let's see if this works, but try to incorporate or even to look at those things in a very methodical thought-through process doesn't really happen. (Alanna, Interview)

Additionally, she wondered if the support of the curriculum development centre staff was really supporting her in her efforts to move forward with the use of technologies. She suggested that the e-learning specialists and the technical staff need to offer more substantial training sessions and not just simple demonstrations of how the technology works. She fears there may not be enough resources and time to evaluate technological innovations on site. She also fears online instructors will continue to miss out on a whole slate of new technologies and teaching strategies:

> We're far enough along in online delivery that there is a whole slate of technology that's been designed and I think that in terms of evaluating it– we may not evaluate it here–we may not have the resources and time to evaluate it here, but I am sure it's been evaluated elsewhere. I guess it concerns me that we're not accessing that information and that the sharing isn't taking place and so when I come across a person who is doing a demonstration like e-beam, you go "Oh, isn't that wonderful", you may not know about it, and I find that limiting. (Alanna, Interview)

She suggested that faculty members would like to hear more about the evaluation of new technologies and teaching practices that have been conducted at other institutions. Faculty members could then evaluate the possibility of transferring this knowledge to their own online courses.

As mentioned by other participants, the technical training support that is now available to faculty members covers some areas of course design, but a more focussed approach by staff trained in instructional design would enhance the quality of courses now being offered at the institution. One of the participants believes that the Centre for Curriculum Development might consider adding "a training arm' to support faculty members" (Alanna, Interview).

As a distance education faculty member, I was pleased to learn the services provided by the Information Technology Department and by the Curriculum

Development Centre served the faculty members and the students very well. For instance, it was felt that the Information Technology staff members were current, were viewed as providing good support for instructors and students, and were identified as a major strength of the institution. As well, the equipment provided to faculty members appears to be satisfactory and is usually upgraded on a regular basis. The e-learning specialists were also identified as providing an essential service to distance education through the workshops and support they provided to instructional faculty. The participants also stated that the senior managers did their best by investing resources into the acquisition of new technologies and equipment.

One recurring theme mentioned by some of the participants was the need to have a team approach to support faculty members as they develop their courses for online delivery. It was felt that the pooling of several areas of expertise would enable instructors to create of more dynamic classroom environment for their students. The need for a team approach increased in significance as WebCT was viewed as a difficult learning management system by some faculty members.

Quality, Course Maintenance, and Champions

Quality of instruction is monitored through student surveys at the institution being researched. Under this topic, I explored how the quality issues in online courses are promoted and reinforced and what strategies are used to continually upgrade and maintain online courses. As well, I wanted to know if there were champions who were supporting e-learning and working to improve quality of online courses.

There were two schools of thought on these issues. The administrators reported that quality had been built in through the adoption of the 'principles of online learning'

guidelines that instructors are to follow when developing and teaching online courses. As well, the administrators referred to the annual student surveys which canvas students about their satisfaction with the online courses, the quality of the courses, and the quality of students' experiences as online students. In these surveys, students are encouraged to provide written comments and opinions about possible improvements to the courses:

> We have that Principles document, so we have that. We do surveys of students and do ask about quality questions and quality experience, and we change programs based on feedback we get from students so, yes, we do that to improve the quality. We're also working with our provincial online body to try to stream a lot of the quality and the support that comes through it. We're piloting in other projects front and centre in college administration and registration pilot project to increase the registration process for students. So we do a lot of things to try to improve quality. (Meredith, Interview)

The administrators also stated that quality is built in by the faculty members as they are a dedicated group of teachers who strive for quality. Evidence of this quality can be found through instructors working with other provincial instructors and through the high school teachers and principals who lease the institution's curricula for delivery in their own schools:

> I'm proud of the fact that when we work provincially with the old online provincial agency before it disappeared. We had a number of instructors working with other provincial instructors, you know the instructors providing feedback, and it worked very well and, again, we received good feedback, and we met our timelines. We have been getting good feedback from our high schools in terms of the quality and, you know, they're coming and they're leasing our courses, and so I believe that there are a number of areas where you can point to where we are doing quality work. (Sophie, Interview)

One administrator stressed that "quality goes to what the content is and, quite frankly, that's the faculty who themselves are building the quality, and I believe they are dedicated and very quality-oriented instructors" (Sophie, Interview). She mentioned that

by maintaining the technology and by providing faculty members with access to conferences and workshops that the college was insuring quality courses. The professional development time and the non-instructional days provided to the faculty members were also viewed as helpful in providing sufficient time for faculty members to improve the quality of their online courses:

> But the other piece of the quality is the faculty-driven content orientation, keeping it up to date, and again, you know, I believe the college does provide the non-instructional and professional development days to be able to do that, that is faculty driven. And you know, I don't think that distinction is always made. (Sophie, Interview)

Faculty members felt that quality issues were a faculty-driven process because they take pride in their work, but that institutionally the process is weak. One faculty member stated that he did not see an institutional approach to promoting and reinforcing quality in our e-learning courses. He stressed that quality was "something faculty do because they want to do it" (James, Interview). One faculty member mentioned that the college's online courses were very good, but that the college was not checking quality of the online courses even though we have Quality Principles document to guide faculty members:

> I would say that they are concerned about the educational quality of the courses, but I think that the protection and the concern about the interest to improve the course has, at this point, remained a faculty-driven thing, and again an isolated personal evaluation by the faculty member himself or herself rather than a process of strengthening the college's offerings through some kind of team effort to analyze and improve…and I would be the last one to want to invite that kind of intrusion too, so it's difficult if I take a step back, I would say it's important that we not drift year after year on a road without evaluating whether we are meeting the needs of the students and the college into delivering first-rate online courses because that's our mission. (James, Interview)

Another participant spoke about the need for quality control. In her view, "quality has been incorporated in our design and our look. We have, I think, a very good product line, but I don't think there's any checking of quality of the actual courses themselves...I think you need some quality control" (Emma, Interview). Furthermore, another participant suggested that we have annual evaluations of our online courses:

> In an ideal world, we would have the time and resources to do this. We would be having a cycle probably on an annual basis, if not on a semester basis to say, this was the course, this was the result, what went right, what went wrong, what can we learn, and how can we improve the course for the next go around. There is no kind of formal approach to constant improvement of the course. (James, Interview)

It was suggested that ways to improve quality would be to present to faculty members courses in which innovative ways of teaching were well developed, success stories, and innovative uses of technology. One faculty member noted that the online course template was helpful but that it did not necessarily result in appropriate links to make it easy for students to move from one place to another within their course.

The classroom faculty member stressed that quality would be critical if a course or a part of a course in her program were to be developed for online delivery. In her view, students in her program "are pretty precarious, so a bad e-learning experience will be translated into just a bad experience at the college" (Rebecca, Interview).

Continual maintenance of online courses. One faculty member expressed dissatisfaction with the allocated time assigned to vocational faculty members to upgrade and maintain their online courses which time, she believes, is closely tied to the issue of course quality. Although all faculty members are given 20 days of professional development release time under contractual agreement to engage in activities that will support faculty members to build discipline expertise and improve teaching abilities

through various activities, those 20 days are, at times, confused with the time allocated to maintain traditional and online courses. Ten days is the time allocated for the preparation and for the maintenance of curriculum in traditional and online classes for all categories of instructional staff at the institution. For vocational instructors, this time period of ten non-instructional days does not appear to be sufficient time to prepare and maintain their online courses. One of the participants strongly suggested that more time is required by vocational online instructors to upgrade and maintain online courses, especially for vocational faculty members who have several online certificate courses to maintain and to upgrade:

> I think that what you are finding is that your professional/course development time, some of that must definitely be put aside. I think there is always new money…so when it's new and exciting and when you are building online curricula, there are ways you can find sources or pots of money, but when you get to the less visible stuff – the ongoing maintenance of courses – I think that it's an area that needs more recognition and that we need to build in some resources to support that, and I'm not sure how that will be done. (Alanna, Interview)

She also believes that moneys should be set aside to buy release time for faculty members to keep courses current, especially for minor revisions that may need to be completed during the semester and for major maintenance in between semesters. This maintenance is especially critical when publishers upgrade textbooks often requiring faculty members to revamp every webpage, quiz, and planned discussions in their online courses.

Another participant supported the idea of maintenance as he stressed that release time to maintain online courses is critical. In his view, after the first offering of an online course, an instructor often recognizes "all the ways in which it could be improved are wasted if the faculty member isn't directed and given resources to proceed to improve the

course" (James, Interview). In addition, he expressed concerns that WebCT is a difficult environment to work in and, secondly, that maintenance is not an institutional priority. This faculty member is "sceptical on the ability of these courses to be easily maintained even if you had the time and I don't see it as being an institutional priority" (James, Interview). Furthermore, he would like to see a process whereby faculty members would strengthen their e-learning courses through building them by way of "a model in which each course is a team effort of three or four people who bring different skills, one of them being the content expert" (James, Interview).

The administrators spoke about online faculty members receiving the same treatment as face-to-face faculty members and that neither group receives preferential treatment as a result of their chosen delivery mode. The administrators suggested that the 20 days of professional development and 10 days of non-instructional and other unassigned non-teaching days that university studies and career-technical faculty members (excludes vocational faculty members) receive are sufficient for non-vocational faculty members to upgrade and maintain their online courses. Another administrator has received feedback from a career-technical faculty member that career-technical faculty members are not in need of additional release time to revise their online courses. She agreed with the career-technical faculty member that the ongoing support through additional workshops and conferences are well placed to assist instructors deal with the necessary upgrade to their online courses and believes that this additional support should be sufficient to support career-technical faculty members:

> I get mixed feedback on this. I've had instructors tell me that they don't need additional release time to revise the courses, but the fact of the matter is that you do have 20 professional days, you do have 10 non-instructional days, there is if you are a Business Administration career-tech or

> University Studies person. You do have additional days that are unassigned days without students. I believe the college is providing that kind of support. The college is also providing ongoing support with additional workshops around new things that are available and people are bringing that back from different conferences as well. So quite frankly, I do believe that the college is providing that support. There will probably be a difference of opinion. (Sophie, Interview)

At the other end of the spectrum, the classroom faculty member is "not aware that there was much support given to people who have been doing courses to maintain or to revive them or to do whatever upkeep" (Rebecca, Interview). The faculty member expressed surprise when advised by the researcher that University Studies and Career-Technical instructors developing online courses get a section release and that she had "have never heard that if you would like to put something online, we would be happy to give you some release time so that you can do a really nice job of preparing it" (Rebecca, Interview).

Champions. The interviewees identified a number of e-learning champions at their institution. Champions identified as e-learning champions included the president, all the deans, the e-learning team composed of the e-learning specialists and the webmaster, the information technology staff members, as well as some faculty members, especially those staff who demonstrated through their efforts what could be accomplished by offering their course materials online. The role of management was viewed as critical in providing a framework for the development, policies, and guidelines to ensure development and implementation of the college's online strategies and to ensure that faculty members were supported in their efforts. One participant stated that she recognized the contributions of others because:

> when you're an instructor who's putting courses online, your focus tends to be very much on students and curriculum and when it comes to policies

> and guidelines and all these things that have been put in place to provide the framework for the development, you know that there's been so many people and not at the instructional level, but beyond who are obviously involved in development of these policies and so, yes, there are champions. (Alanna, Interview)

Others felt that the president and the deans were always looking for opportunities to continue development in a systematic and organized manner to reach the institution's educational goals and objectives:

> As far as management goes, I definitely feel that [Dean 1] is a supporter and [Dean 2] has been, she's always looked at it as an opportunity, and I would imagine from what I know from the nursing program being online that all of our deans are supportive, and I would say that the president appreciates where we are and how useful a tool it is for us to reach our objectives. I would say that he is supportive. (Emma, Interview)

One administrator mentioned that the Board and the Library staff were champions. As well, management is looking at organizing some of the institution's services to better serve the online student population:

> There isn't an issue at all with any of the administration, and I think we've really looked at spanning the service side of the house on how we can integrate those services to support online learning with online registration, our new CD that's coming out for our program guide for our distance learners, all of that are major projects for our website and program information so that it's more acceptable for distance learners. The Library is looking at online tutorial. So there are more than the programs but also how we're supporting services. (Meredith, Interview)

Another administrator mentioned that champions are those staff members who are working and teaching online and that, surprisingly, some faculty members who didn't start out being champions are now highly supportive and are defending the online delivery methods and now prefer them over traditional classes. As well, she mentioned that there are many champions in management although the support is not universal:

> What I will say is that at the senior level of management there is a very clear understanding of how important e-learning is and that there is a push

> for, I feel pressure, to see e-learning develop and to see our relationship in e-learning established to make sure that we're working with other colleges in developing as many educational opportunities as we can for the region. (Sophie, Interview)

She also felt that there are people in the faculty who were not part of the early group of online instructors but who have now become champions. Some of them have become defenders of distance education:

> I believe that there are champions in faculty. Many of the champions are people who are actually doing it, and some of them are people who didn't even start out as champions but became champions through the process and … because they're in there defending the delivery. They are in there defending the fact that for some, I guess the one that comes back to me is a reference earlier to the fact that there are instructors who may teach two sections face to face and one section online who find that their classes are actually quite different and that their level of discussion sometimes online is much higher than in the classroom. In other words, they can see some benefits to the differences, so they've become champions, and I now know that there are a couple at least of faculty who prefer to be online rather than face to face, so they are champions. (Sophie, Interview)

One faculty member reported that when she thinks of champions, she thinks of "hands on, putting some time and energy into it rather than just saying we support e-learning" (Rebecca, Interview). In her view, the e-learning specialists are an example of e-learning champions.

This topic generated differences of opinions between the administrators and faculty members. On the one hand, the administrators believe that there are sufficient resources and time allocated to staff to maintain the quality of their courses. Faculty members believe the maintenance and the quality of online courses are faculty driven. They also reported that institutionally the quality control measures are weak and that maintenance does not appear to be an institutional priority.

Given the different categories of employees at the institution, there appears to be a need to revisit the amount of time allocated to online vocational instructors to upgrade their courses, especially since their teaching year is longer than the academic year.

Having stated that there are differing viewpoints on quality control and allocated maintenance time, there are, according to both groups, many champions of online learning at the institution. Since the management and the faculty members have different opinions on maintenance, the leadership of both groups might want to work with the e-learning champions to revisit how quality controls could better be applied at the institution.

Growth and the Future

Since the launch of e-learning at the institution, there has been growth in the number of web-based courses offered by various departments. If the institution's distance learning initiative is to continue to grow, there are critical areas that need to be explored. In this section, my research focussed on the process and rationale for determining e-learning needs, the sustainability of the initiatives, and the projected growth of e-learning, if any, for the next five years.

Rationale. There are a number of external and internal processes in place to support the development of e-learning projects at the institution. The most significant external body is a provincial agency that coordinates the delivery of online courses offered by colleges, university colleges, and universities throughout the province. For instance, this agency was responsible for coordinating the creation and delivery of the online associate arts degree program as shown on the agency's website. Both administrators and two faculty members refer to this agency as an important factor in

determining the web-based course offerings for academic, career-technical, and vocational programs. It is worth noting that three of the four faculty members participating in this research have been involved in the creation and delivery of online courses through this provincial agency. Another external organization that has played an important role is the provincial trades training agency. This agency was instrumental in giving direction and in funding for specific online courses in the Trades Programs.

The most critical internal factor mentioned by four of the six participants is that many of the online initiatives are faculty driven. The process described by two participants requires that following a faculty member's proposal to put a course online, the request moves through the department and up to the dean:

> Actually, there are several processes, I think, in place at the college. It would start from a process from an individual instructor having a look and saying 'I think my course or my program would be very suitable to online or to a portion being online.' So there's that process which would work its way through the department to receive some support and release time to develop through the development funds. (Meredith, Interview)

In this participant's view, the faculty-driven process at this institution has worked well for faculty and for management. Following the faculty member's request to develop a course for online delivery, the appropriate dean applies for funds to support the faculty member's request:

> There is a movement from the bottom up to bring it up to management and then you do your part, and where are the dollars, and how can we support this. And, eventually, it all meets in the middle so that it becomes a reality. (Meredith, Interview)

In support of the faculty-driven process, one vocational faculty member suggested that this process is common practice in her program. She indicated that the process has worked very well:

> We have always put together rationale, and they've always gone forward. First the program coordinator would usually initiate it, and then the department head, and then the dean, and right up to the college planning aspect of things. (Alanna, Interview)

For example, in 1998, faculty members in her program successfully put forward a proposal to the Innovation Fund for resources to begin the development of its first online courses. This faculty driven request is well documented in the department correspondence and in the Board Report. The practice of faculty-driven requests to offer web-based courses is also the way another department proceeded with its course offerings:

> As far as I know, the process has been ad hoc and driven as much by individual faculty members interested as by the deans' request as by any attempt to plan within a program, and I think that may reflect the early days of an experiment in the medium, and one in which there's a lot of extra work involved for faculty who choose to take it on. So you would naturally try to start with those that were enthusiastic and then as we get into 2004, the plan seems to be cohering to add a two-year online business diploma for instance, so maybe at this point, you can begin to say 'There's strategic thinking about where we want to be in terms of the online offerings.' At the outset, I would say it was much more personal choice, individual preference, these directions, these urgings… (James, Interview)

According to the college leadership, other ways in which rationales are developed are through "a series of focus meetings and through a series of interviews and exit surveys for students and also focus meetings in the community...and especially in the regional campuses. That has been part of what has formed our strategy" (Sophie, Interview). Under the institution's Education Directions and Priorities document, all programs are mandated to meet with their program advisory committee members twice a year at which time the program staff receive directions from the program advisory members. In addition, the executive assistant to the president reports that the president travels to the regional campuses to meet with college staff and community leaders to

assist in determining the needs of regional students, and specifically, to learn which courses students in remote centres are most in need of receiving at their campus or directly to their homes via the Internet. Furthermore, she advised the researcher that the college's Board of Governors also visits the campuses and regional leaders twice a year to confirm, among other things, the types of online courses the college should be offering students in smaller cities, towns, and rural areas. Following those meetings with regional leaders, a question-and-answer session takes place to allow community people to interact with members of the Board.

One administrator and one faculty member stated that workload issues have played a dominant role in determining the institution's e-learning rationale. From an administrative view, the addition of online delivery has resulted in the creation of a more stable workload creating more employment stability for faculty and greater efficiency for the college. This view is supported by a faculty member who pointed out that by offering one section of a course through online delivery has meant that students were able to access a second-year course that had been slated for cancellation.

The rationale for developing two certificate programs, one in a business program and one in a vocational program, was based on student survey results. However, one faculty member mentioned that the market research should be better developed to ensure that program faculty members in each department have knowledge of the needs and levels of interest of potential students. As well, she noted there is a need to know who our competitors are in the market place to help in the decision making and program planning process. In her view, knowledge of the market place would be helpful to faculty members who want to initiate faculty-driven requests for development and delivery of new online

courses. Some of the questions this participant would like to see addressed through this market research include the following: "Who is the competition? How many students want it? Will they take our course? How many students will it take to offer these courses? What is our breakeven number? But we haven't really gone there." (Emma, Interview).

Although faculty driven requests by enthusiastic faculty members have resulted in the quick development of a number of courses, this approach has concerned faculty members in that the efforts don't appear to be coordinated. One faculty member reported that the decision seemed to be based on convenience rather than a planned approach:

> The rationale depends on what opportunities are out there. So instead of being logical, it's opportunistic in that depending who has funds available, let's apply for this without thinking how it fits necessarily into a bigger picture of people's workload to see if we are we actually getting chunks of programs or bits of programs. I know that is a problem with any organization that depends upon being given money, applying for funds rather than raising your own. (Emma, Interview)

However, although this faculty member has concerns, the department she refers to is now well into developing the second year of its two-year diploma as posted in the online course listing under the institution's distance education link.

The faculty member who is involved solely with classroom delivery believes her department has not developed a plan or a rationale for the development of online courses. Though urged to move in that direction, department staff members have not embraced the topic and have not shown much interest in developing a rationale. In this participant's view, there is no rationale at her department level:

> I don't know that I know the rationale, and I'm not even sure that our department really knows its rationale. I think it's a bit willy-nilly. I don't think we're following a plan. Basically that's my perception, and I'm not even sure that's even a question we're asked. (Rebecca, Interview)

Sustainability. The range of views on sustainability was very broad, but all participants agreed that the institution will continue to offer online courses, even though faculty members are concerned about the need for additional resources. The range varied from "I don't see the limit right now as to how far we will go" (Meredith, Interview) to worries about sustainability as a result of the high development cost of web-based courses because "people thought it (development cost) was more than what they thought it was going to be, so that could also affect the sustainability of it" (Rebecca, Interview). Another faculty member also expressed concerns that those faculty members who adopted web-based courses in the late 1990s may "after the initial flurry of enthusiasm, be worn down by the development costs in terms of time and energy" (James, Interview). This same faculty member also worried that some of the online classes are being populated by our traditional face-to-face students which could weaken the on-campus programs. One participant spoke about the need for more development but also worried about development cost:

> I think we're going to need to do more, but I think we're going to have to expand. There's going to be growth. I think that the existing resources that we have – I mean you could always do more – but I think there are limits to what can be done with the resources that we currently have, and I think we will see growth in this area and that the college has got to commit resources to that. (Alanna, Interview)

In terms of sustainability, one of the participants believes that "we're stretched to the limit now, and if we grow, we may need to rethink how we support and how we organize e-learning" (Emma, Interview). Another participant elaborated on some of the problems the institution may face if it overextends its online delivery:

> They've got a very ambitious target of increasing the number and the range of courses that they're offering and, as I said earlier, that they've proceeded on a shoe string in the development of the courses that I'm

> most familiar with and that for that reason and others, I think these courses are difficult to maintain, may not be satisfying the needs of the target audience of students, and it may also prove that down the road that faculty are, after the initial flurry of enthusiasm are worn down by the development costs in terms of time and energy. (James, Interview)

Although this participant worried about maintaining his online courses, he also worried about the quality and sustainability of the online courses. In his view, following the creation of online courses, the faculty member will need to devote much time, energy, and resources to maintain these courses which may not be sustainable if enrolment is low:

> I know it was very difficult to put together the first course, it was a tremendous learning curve, and a lot of time throughout the semester in maintaining that course, and what I'm told by colleagues is that it's easier to deliver the second time around because the framework is there, but since I wasn't entirely satisfied with the framework of the first course, I think there's a lot of work that I would have to do to improve the first course as I'm thinking about doing a second course. And for any of our courses to be sustainable, the students have to be taking the courses, engaged in the courses, and I'm not privy to the numbers beyond my courses to know where we're finding our audience, and I understand that there are courses with 2 or 3 students, 4 - 5 students; those are not sustainable numbers in the long term although they might be justifiable in the short term as we develop the courses. (James, Interview)

Given that the online faculty members will soon embark on an e-learning project with a much larger college to satisfy the larger college' waitlist, it would be wise to pay attention to the support faculty members receive and to the maintenance the online courses might need. One participant noted that for this institution to be selected to address the student waitlist of the larger institution reflected well on the institution and its instructors. The sharing of a waitlist "has never happened in our system, but I feel that this institution is seen as being progressive, and I also think that we do quality work, and I think we're known for that" (Sophie, Interview).

Growth in the next five years. The participants confirmed that the institution will continue with its directive to develop more e-learning materials, but that the development and implementation will be done more incrementally than it has in the past two years. The administrators and three faculty members also see growth in the traditional areas of trades, business, university studies, and health programs. One participant reported that the institution has just begun to tap into health and that "it's just going to grow tremendously" (Meredith, Interview). One faculty member suggested that the institution may be "doing a lot more partnering in the next five years. I think we will see our institution working as a partner with other organizations to deliver education and training" (Alanna, Interview).

Some of the participants also view International Education as an area of possible development given that much ground work by college staff has been conducted in Asia, South America, and Africa. One participant mentioned that China has educational needs in terms of its population learning English, business applications, and office skills but felt "the existing faculty can't do it unless somebody else is hired to do what they are now doing. They can't do the development on top of their current job" (Emma, Interview). Unless there are new hires, she sees only very incremental growth in online delivery at the international level at the institution.

One administrator reported that the college leadership is "thinking more globally, and there are definitely international opportunities" (Sophie, Interview). She also believes that online delivery "has become part of the college's culture…and that the change to integrate this is a little bit down the line towards becoming part of the norm in terms of our offerings" (Sophie, Interview).

Some of the participants anticipate that integration of some aspects of e-learning into face-to-face classes to create a blended classroom to enhance traditional classes will most likely occur. This integration may give non-online faculty members opportunities to learn new ways of bringing the outside world into their wall-bound classrooms and bridging traditional classroom with the virtual world. One faculty member stated that the arrival of wireless communications and the adoption of portable computers as well as more computing resources in the classroom may change the traditional classroom:

> We can probably see a lot of courses beginning to blend face-to-face traditional teaching with e-learning components and a blended classroom is exciting to a lot of faculty members who have found there is real potential in the online environment and some real hurdles which could be addressed with face-to-face teaching. (James, Interview)

For the classroom faculty member, there are many concerns about using online courses in her department. The primary concern is that online delivery may not grow and that the few courses offered online in her department may even be reduced since courses are enrolment driven.

In this final topic, it is clear that faculty members, the administrators, and the community at large have played a critical role in the selection and development of e-learning courses through focus groups and program advisory committees.

One of the earlier approaches to initiating the development of online courses was that of faculty-driven requests to management. This process, which required that interested faculty members prepare proposals to be presented to the department and to the dean, worked very well and is still used today. Although this approach resulted in quick development of online courses, it also led, at times, to an uncoordinated approach to the development of courses within programs. In future years, the faculty-driven process

should continue to co-exist with other forms of requests as this process stimulated the imagination and the drive found in many faculty members.

The information gathered through student surveys, focus groups, program advisory committees, and visits by administrators to regional communities, has also been very effective in supporting the selection of online courses. This formal approach has resulted in meaningful discussion at the department and administrative levels before funds are allocated and release time given to the faculty members in charge of the development. Both administration and faculty members should continue to participate in information gathering activities which provide impetus to continue with exploration of educational needs of regional and provincial students.

In terms of sustainability of distance education, all participants agreed that online courses will continue to be delivered at the institution. Although there is enthusiasm for online courses, there are also worries which centre around the high cost of development and the ability of faculty members to sustain the level of energy required to develop and maintain several online courses. Given that quality is a priority for faculty and the management group, additional resources may have to be allocated to maintain the standards outlined in our Principles of Quality in Distance Education Guidelines.

All participants agreed that the development of online delivery will continue but that it will be more incremental in the future than it has been in the past three years. Of special interest are the possibility of developing more courses in the trades, health, university studies, and business areas. As well, given that the management group is highly interested in international ventures, it is very likely that the administrators will pursue this venue in the future.

CHAPTER 5: Summary

The research question probing the level of readiness of the institution to change and the kinds of attitudes that existed among administrators and faculty members to change as a response to e-learning has made me reflect on the processes that took place at the institution. Although there were challenges faced by administrators and faculty members, my conclusions are that given the speed of implementation of distance learning courses and the willingness of faculty members to adopt educational technology to serve their student population there was willingness by all parties to meet the stated distance education goals and objectives.

Given the rate of adoption of e-learning at the institution and my interpretation of the data, my conclusion is that the level of readiness of the institution to absorb, manage, and implement changes as a response to e-learning was and remains high. The level of readiness was achieved through the work and effort of the institution's leadership and by those faculty members who chose to engage in distance delivery as reflected in the adoption of e-learning as a delivery method. One of the recurring themes during this interpretive case study was the recognition and acknowledgment by all participants that the institution's mandate is to serve our local and distance students. Although distance learning was not unanimously adopted by all participants, the delivery of education through the Internet is generally viewed by staff as an acceptable way to reach students. Given that the e-learning goal set in 2002 of doubling online courses in two years and doubling them again in five years will be met in 2006, well before the 2009 deadline, validates the work done by instructional and administrative staff. In my view, the success

of the distance learning initiative rests fully with faculty members who were diligent in recognizing the need to reach their distance students and in showing a great amount of dedication in pursuing that mandate and with the college administrators who

a) developed a vision, institutional goals, and strategies to support faculty members, staff, and distance learning students,

b) supported faculty members who put forward proposals to develop distance education courses and supported programs that undertook to serve their students through this delivery method,

c) developed a workable, but bold, implementation plan to guide faculty members in their work to carry through with the institutional vision and goals,

d) had the foresight to recognize the positive effect e-learning has on distance learning students and to meet the educational goals of those distance students,

e) promoted learning opportunities for staff by posting information on conferences offering knowledge of and teaching seminars on e-learning,

f) enabled staff to receive training in the use of technology to transform their courses to meet the challenges of teaching online,

g) released faculty members to develop their online courses by given them a section release from their regular teaching workload,

h) insured that the technology was in place to support learners and instructors and created new technical positions to support instructional staff involved in the development and eventual delivery of online courses.

In addition to the Problem Statement stated in Chapter 1, there were seven questions I felt needed to be researched to enlarge on the activities that took place at the

institution around the development of distance learning. The questions and answers were helpful when I interviewed the participants.

Question 1: Have the institution's mission, goals, and strategies been revised to align with new technological delivery methods? Are they widely published?

When I began this research, I was not aware of the full effect a strong vision has on an organization and its people. At this institution, the revised vision and goals were clearly articulated, promoted, and publicized through various media. To reinforce the message, print materials and digital messages were widely distributed to staff at the main campus and in the regional campuses.

Following the publication of the goals and objectives of the institution, the management group began implementing a structure to support the goals through a new e-learning faculty position and by redirecting and training technical staff to support faculty members and students. At the centre of this new activity was the need to enable faculty members to learn new technologies and new teaching strategies. To support faculty members, the e-learning specialists and technical staff were instructed to work with the online teaching faculty members to help them prepare their teaching materials for electronic delivery. As an incentive, online faculty members' computers were upgraded and necessary software installed. To put it simply, the organization began to work in a coordinated manner to ensure the goal of increasing its online courses to regional students was met in a timely way while maintaining quality instruction.

At the department level, department heads, coordinators, and department staff were instructed to develop action plans to begin implementing the various goals listed in the institution's educations priorities document. The action plans were shared with and

reviewed by program advisory committee members. Following this process, the action plans were used in each department as a guide to staff. Action Plans sent by program coordinators to the researcher and minutes of program advisory meetings show that the action plans are reviewed and updated on a yearly basis.

Question 2: Is there a formal process for determining e-learning rationale at the institution being researched?

To date the informal faculty-driven requests put forward by faculty members, coordinators, and/or department heads to the deans outlining the necessary resources, including release time, to develop online courses has worked well for the institution. However, this approach has, at times, resulted in a poorly planned program and departmental approach to the development of online initiatives. The idea is not to do away with this process that has worked well for faculty and senior management. Instead, the creation of a formal process that empowers faculty and management to discuss a more coordinated approach might result in online programs that better meet the needs of students and faculty members and results in greater efficiency at the department and institutional levels.

Question 3: To what extend might the institution's goals be seen to be aligned with student and faculty needs?

Student survey results indicate that students' educational needs appear to be met and their technical problems solved by the e-learning specialists and technical staff. At this time, the number of online courses continues to increase indicating that students' are seeking additional educational opportunities through this mode.

As reflected in the research, faculty members required time; that is, time to learn the technicalities, the approaches to designing their courses, and time to create their online courses. In terms of their technical needs, faculty members received technical training and new office computers. But most importantly, faculty members needed time to learn how create online courses, how to teach in this mode, and how to work with online students. This last need was addressed through the training provided by the e-learning specialist. The time issues were addressed by online faculty members receiving a section release (1 course release for the semester) to develop their online courses.

Faculty members were encouraged through various incentives (release, training support, and equipment) to experiment with online delivery. That faculty members' needs appear to have been met might have promoted the quick adoption of online delivery at the institution. It must be noted that under the Collective Agreement in force at the institution, faculty members cannot be forced to adopt e-learning. The notion of choice by faculty members to determine their involvement may have also played a role in the quick adoption but also in addressing faculty members' needs to select a delivery method that would work well for their students. During and following the formal interviews, no one came forward to say that faculty members had been forced or coerced into 'going online' or punished for failed experiments. That faculty members were allowed to take risks and the respect shown to them by allowing them to determine their delivery mode may have contributed to the quick development of the institution's distance education project.

Question 4: Does the financial plan include budgets for additional faculty professional development?

The faculty members who were interviewed felt that the professional development funds presently available to them were sufficient ($3,000 per faculty over a 4-year period) to accomplish the goals these individuals set out for themselves. Proposals that I have reviewed containing a professional development component have, at times, been accepted by senior management. Although there are additional funds available to faculty for professional development related to e-learning (ie, attendance at e-learning conferences), the total amount of this fund is not known to me nor will this total be disclosed to faculty members.

Question 5: Is faculty empowered to play a key role in the decision-making process surrounding the change toward e-learning?

Two formal processes that allow faculty members to play a role in the decision-making process include being elected to the Educational Council or to the Board of Governors. The program advisory committees that faculty members attend may provide them with an avenue to formalize a request for the development of e-learning courses. The informal faculty-driven process allowing faculty members to petition the deans to develop proposals for online course development is perhaps the most widely used process to put forward proposals directly to the decision-makers. Department meetings are avenues of discussion for course development in general but have been used as a formal way of setting an agenda for the development of one or more online courses and program planning at the faculty level.

Question 6: Is the college's technical infrastructure perceived to be designed in such a way that future changes to technology can be easily integrated within the existing infrastructure?

Administrators commented that they do their best to keep up with technology but that the institution can't afford to be on the bleeding edge. Technical staff and administrators continue to investigate new technologies but remain cautious in their selection given the cost of purchasing and integrating new technologies. At the faculty level, there is also a recognition of the high cost of technologies, but it was generally felt that the college administrators are doing a good job bringing in new software and hardware, but overall faculty members could not comment on the ability to easily integrate new technologies as this topic is outside their field of expertise.

Question 7: Are the institutional leaders' and faculty's attitude such that they may be ready to embrace change?

If we refer to the Operational Definition in Chapter 1 which states that attitude toward e-learning refers to an individual's level of readiness to engage in and/or promote activities leading to the adoption, development, and delivery of online courses, then the conclusion is, based on the increase and variety of online courses at the institution, that educational leaders and faculty members are, generally speaking, ready to embrace change. From a small number of faculty members who first engaged in distance education courses, now there is a much larger number of faculty members offering a very broad offering of courses in arts, science, humanities, business administration, applied business technology, recreation, nursing, early childhood education, and human development. At present, the institution's website shows 58 online courses to be offered

in the 2005-2006 academic year. Given that there were approximately 15 online courses offered at the institution before 2002, the number of online courses has more than doubled in two years. At the time of writing, the institution is only two online courses short of meeting its 2009 target. Since several online courses are in the planning and development process as shown on the 2006 class schedule, the goal of doubling the number of online courses again in the next five years will be met within the next 12 months. Based on the current offering of distance education courses and the ability of administrators and faculty members to reach its goal at a much earlier time suggests that staff at the institution have embraced change.

Although e-learning has been generally accepted by staff at the institution, not all programs have adopted this delivery mode. It must be stated that there is at the institution a deep tradition of supporting students in a very personal manner based on sound adult education principles. At some point, it must be recognized by the administration that some at-risk students are best served by instructors who can address student needs in the classroom by personal one-on-one contact and by having these students work along side other students in a social setting. That is not to say that these students should not experience some form of delivery through educational technology, but an acknowledgment that some students are not ready at this time in their life to gain knowledge of their chosen field of study without the support and the personal touch of their college instructors.

These seven questions, I felt, were helpful in understanding some of the activities that supported the adoption of e-learning at the institution. By analysing the first steps taken to announce the initiative, to the roles that administrators and faculty members

played, and the support that was required in terms of support for faculty and in terms of technical support assisted in understanding the process that took place to launch, implement, and support the project over a period of three years.

Recommendations

Based on my understanding of the college and my interpretation of the data, the following are recommendations that might be of assistance to the administrators and faculty members in their quest to increase future delivery of online courses at their institution. The following recommendations apply specifically to this particular institution, its administrators and faculty members.

Benefits of E-learning. To encourage additional faculty members to offer more online courses, the benefits of e-learning for students and staff should be restated. Generally speaking, faculty members are more excited about creating courses when they are aware of the benefits their students will gain through faculty members using this form of education. Building knowledge of and enthusiasm for e-learning at the grassroot level and for new hires will result in faculty members who are better equipped to deal with emerging technologies when introduced to the educational world.

Process to Determine Distance Education Needs. The creation of a new process that focuses on program planning for distance education should be created. Although the informal process of directing distance education requests to the deans as worked well to date, an additional approach that encourages faculty members to view their requests within the context of all the online courses may result in a better coordinated approach resulting in additional certificates being made available online to distance education students.

E-Learning as an Essential Student Competency. Since e-learning is not used by all departments but is an institution-wide goal, strategies should be developed to ensure that some small e-learning components are developed within each department to expose their students to this new delivery method. Given the development and expansion of e-learning in the past ten years, e-learning is quickly becoming an essential competency needed by all learners and educators but especially by life-long learners. The educational leaders would do well to ensure that all students leaving the college have completed one online course or, at minimum, have had exposure to online learning through some form of hybrid class or through completing a short online course in their field of study. This emerging student need should be considered in future distance learning development at the institution.

Diffusion of Institutional Goals. That the senior management took great care to publish its distance education goals follows good management practice, but as is often the case, not all faculty members heard the message and not all departments have adopted e-learning as a delivery method. It is unfortunate that some faculty members were not aware of the release time given to faculty members who engage in the development on online courses or of the support that is available to faculty members. To reach all faculty members, department heads and coordinators should receive special training in communicating institutional goals and strategies and be part of the communication scheme. Staff in these positions should work with the deans to ensure that members of their department fully understand the goals of the institution and the new developments surrounding new projects. As well, department heads and coordinators must be made aware of the incentives available to faculty, such as release time, to develop their

traditional courses into distance learning courses. Furthermore, these staff members should be encouraged to maintain, through formal educational training, a good knowledge of adult education, educational psychology, and educational technology to give them a better understanding of how high quality online courses can benefit learners. This additional knowledge will also support the quality faculty members are expected to build into the department's distance education courses.

Equity in Release Time. Policies in place that favour some faculty members receiving more release time should be eliminated. The release time given to career-technical, university studies, trades, or vocational instructors involved in e-learning should be based on the same formula. Ensuring equity within all faculty groups will ensure that access to distance education results in all students having access to online courses or some form of online instruction regardless of the program students choose.

Limited Resources. Although the institution is a small college, the administrators chose to use the limited resources of the institution to implement the new technical support and to create the e-learning specialist and help desk positions to support faculty members who expressed a desire to adopt the new delivery method. A detailed analysis of budget planning and accounting transactions to fund the e-learning initiative was beyond the scope of this research. However, it must be stated that even though resources were allocated to support distance education, the institution's financial position has remained healthy and has not experienced a budget deficit for a number of years, nor were there layoffs as a result of this initiative as stated by the bursar in a public forum that I, as well as numerous staff, attended in June 2005.

It is recommended that a full disclosure of the total amount of additional professional development funds available to faculty members interested in undertaking scholarly activities that promote distance education be made public by the end of the current fiscal year. These additional professional funds dedicated to the promotion of e-learning would encourage faculty members to attend e-learning conferences, workshops, and seminars. As well, faculty members eager to increase their knowledge of educational technology and adult learning theories would increase their competency and knowledge in this specialized field.

Team Approach. It became clear during the interviews that the use of educational technology is perceived as a discipline that requires users to have a substantial body of knowledge. It also became clear that some instructors favour a collaborative approach to designing and implementing their online courses. Some of the participants mentioned that a team approach would be very helpful when instructors are faced with developing sophisticated materials. Training in instructional design was also mentioned as a tool that would be beneficial to faculty members and to the quality of their online courses.

Quality. Quality is a key word at the institution. All faculty members, technical staff, and service staff might benefit from sessions that focus on quality. A higher level of quality and quality control may be reached through the hire of an instructional designer specializing in andragogical issues and evaluation of online courses for the months of May and June when the traditional development of courses takes place at the institution.

Educational Technology and Adult Learning Theories. In terms of learning educational technology, a more formal approach to learning new technologies from both

a teaching and a learning perspective and with emphasis on appropriate adult learning theories would benefit faculty members and distance learning students. Formal training in educational technology that focuses on incorporating learning and teaching strategies and techniques would assist new and experienced online instructors to view their course development from new perspectives.

Communication Centre. Finally, educators need a virtual lounge where they can meet, talk, share ideas, and brag about their accomplishments or their use of technology to reach students or to create dynamic learning environments for their students. A simple and inexpensive blog might be a way to encourage faculty members to share their ideas and to problem solve teaching and technological issues.

Planning for the Future

In 2002, the administration set very ambitious e-learning goals for this small, rural Western Canadian institution. Since then, this institution has continued to develop its distance education courses and programs. In its 2005-2007 Institutional Service Plan, there are clear messages that online learning will continue to be one of the delivery methods used at the institution. Objectives reported in this document include plans to extend distance education opportunities throughout the region and to increase online courses by 3% per year. Under the activities to take place to support this increase in distance education are the need to increase wireless capacity in all campuses; update the distributed learning plan by 2006; review the technology plan by 2006; work to expand the services available to online students; review program areas where distance delivery is necessary for access; and finally, to develop and deliver courses following the institution's principles of quality in distance education guidelines.

Challenges

Challenges the administration and faculty at this small institution will face are the need to keep up with emerging technologies and the need to continuously upgrade distance learning courses to newer technology standards. The upgrading of technology and the maintenance of distance courses are expensive activities required of quality institutions. The administration and faculty members should plan together the best approaches to solving these perennial concerns.

During the interview sessions, fears were expressed by some participants that on-campus students were enrolling in distance education courses resulting in fewer students accessing the traditional classes offered at the campus. Research on this topic to validate this claim might be helpful to faculty and administrators to support future expansions of on-campus and online programs.

Although the college is defined as an institution that offers distance learning and has branded itself as such, the leadership might want to enlarge this image by defining itself as a 'provider' institution, one which creates and delivers online courses for itself and for non-online institutions (Paul, 2003, p. 77). By projecting this enlarged image to a wider audience, the college may be able to grow at a faster rate given that it would receive additional recognition for its dual mandate of offering both traditional classes and distance learning courses on a larger scale. The challenge may be in negotiating partnerships with 'host' institutions who limit themselves to delivering online courses developed by staff at provider institutions. Although e-learning courses are offered at a number of institutions, the high costs of technology, the need for staff to continually update courses using new technologies and new software, the need for faculty members

to remain current with technological developments may deter some institutions from continuing to maintain their own online programs. Host institutions may then look at partnerships with provider institutions as a way to focus on their own traditional delivery and on limiting the high costs of their in-house technologies, training, and maintenance.

Personal Reflections

When I first began my research, I naively believed I would be able to take a snapshot of the institution and its people. What became clear early in my research is that faculty members and administrators at the institution are not static in their thinking and in their actions. What I was really looking at is more of a production under development with a predicted outcome but with shifting technologies, new ways of doing business, and with people assuming new roles. I was fortunate in the timing of my research as my work began after the start of new directives, and fortunate in that the goals were reached by the end of my research. As well, at present, new directions have recently been announced and posted on the college's Intranet which directions build on the previous successes of the institution confirming the long-term goals and priorities for distance education in the next few years. I hope another person might conduct additional research in three or four years to see if change continues to be imbedded in the organizational culture and if change is still ongoing at the institution.

Future Research

As more institutions move into the co-existence of dual modalities of delivery methods, research into how well the dual models are being accommodated and how well these models support the on-campus and off-campus students should be explored. At some point, research should also be conducted to investigate the possibility that distance

education students, typically described as students who are working at a distance from the institution, are being joined by their on-campus students. That is to say, are on-campus students electing to enrol in online classes as a matter of convenience and choice? If the 'traditional' online students are being joined by their once on-campus students, this information would be useful to departments of education, administrators, and faculty members when additional physical space is being planned to meet the needs of on-campus students. A shift from on-campus students to online students as a student choice has the potential of altering the allocating of resources in terms of physical space and in terms of added support to technological investments into educational support. This information would be critical to faculty members before the annual course planning is undertaken. If a greater number of students are choosing distance education to traditional classrooms, is there a risk to institutions who do not offer distance education? Might those institutions become host institutions delivering other institutions' online courses leading to distance education becoming centralized at a few provider institutions? The possible shift of distance education to a few provider institutions could have implications for students, faculty, administrators, and departments of education at the provincial and national levels.

REFERENCES

Ansah, A. O. & Johnson, J. T. (2003). Time will tell on issues concerning faculty and distance education. *Online Journal of Distance Learning Administration.* Retrieved February 24, 2004, from http://www.westga.edu/~distance/ojla/winter64/ansah64.htm.

Bates, A. W. (1995). *Technology, open learning, and distance education.* Cornwall: T J Press (Padstow) Ltd.

Bates, A. W. (2000). *Managing Technological Change. Strategies for College and University Leaders.* San Francisco: Jossey-Bass.

Bates, A. W. and Poole, Gary. (2003). *Effective teaching with technology in higher education. Foundations for success.* San Francisco: Jossey-Bass.

Berge, Z. L. & Kearsley, G. (2003). The sustainability of distance training: Follow-up to case studies. *The Technology Source, Commentary*. November/December 2003. Retrieved January 4, 2004, from http://www.wisc.edu/depd/html/TSarticles/Sustainability.htm.

Berge, Z. L., Muilenburg, Lin Y., & Van Haneghan, J. (2002). Barriers to distance education and training: survey results. EModerators. Retrieved July 10, 2003, from http://emoderators.com/barriers/barriers2002.shtml

Collins English Dictionary. (1992). 3rd Edition.Glasgow: HarperCollins Publishers.

Department of the Navy, Chief Information Officer. Learning in a virtual world. [CD-ROM], Available: 2004 (V1.1 Aug 03). [2005, July 15].

Dessler, G., Starke, F. A., & Cyr, D. J. (2001). *Management, Leading people and organizations in the 21st century*. Toronto, ON: Pearson Education Canada.

Elearnspace, Everything elearning. (2003). Retrieved November 23, 2003, from http://www.elearnspace.org/Articles/innovation.htm.

Fender, D. L. (2001). Student and faculty issues in distance education. Mid-South Instructional Technology Conference. Retrieved July 23, 2003, from http://www.mtsu.edu/~itconf/proceed01/4.html

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research, an introduction.* (7th Ed.) Boston: Allyn Bacon.

Galagan, P. (2003). The future of the profession formerly known as training. *Learning Circuits*. Retrieved December 30, 2003, from http://store.astd.org/product.asp?prodid=2316&deptid=.

Galusha, J. M. (1997). Barriers to learning in distance education. *The Infrastruction Network.* Retrieved July 27, 2003, from http://www.infrastruction.com/barriers.htm

Graves, W. H. (2001). Framework for an e-learning strategy. Retrieved January 17, 2004, from http://www.educause.edu/ir/library/pdf/NLI0014.pdf.

Gravetter, F. J. & Wallnau, L. B. (1999). *Essentials of statistics for the behavioural sciences.* (3rd Ed.) Pacific Grove: Brooks/Cole Publishing Company.

Hanna, D. (2000). *Strategic Education in an Era of Digital Competition.* Atwood: Madison.

Haughey, M. (2003). Planning for open and flexible learning. In S. Panda (Ed.), *Planning and management in open and distance education* (pp. 53 – 62). Sterling, VA: Kogan Page Limited.

Hanna, D. E. (2000). Higher education in an era of digital competition: Global Consequences. In D. E. Hanna (Ed.), *Higher education in an era of digital competition: choices and challenges*. Madison, WI: Atwood Publishing.

Kapp, K. (2001). Learning requirements planning: an enterprise-wide learning management approach. Department of Instructional Technology and Institute for Interactive Technologies. Retrieved December 30, 2003, from http://e-learningguru.com/wpapers/kapp_lrp.pdf.

Kaplan-Leiserson, E. (2000). Learning Circuits Glossary. *Learning Circuits*. Retrieved February 20, 2004, from http://www.learningcircuits.org/glossary.html.

Jones, E. T., Lindner, J., R. Murphy, T. H., & Dooley, K. E. Faculty philosophical position towards distance education: Competency, value, and educational technology support, *Online Journal of Distance Learning Administration.* Retrieved July 10, 2003, from http://www.westga.edu/~distance/ojdla/spring 51/jones51.html

Lerner, A. L. (1999). Strategic Planning Essays. Unpublished manuscript. California State University, Northridge. Retrieved December 26, 2004, from http://www.des.calstate.edu/processmodel.html.

Lim, D. (2000). Fostering a technological cultural change: the changing paradigms at the University of Minnesota Crookston. In L. A. Petrides, (Ed.), *Case studies on information technology in higher education: implications for policy and practice.* (pp. 240-247) Hershey, PA: Idea Group Publishing.

MacDonald, H. I. (2001). Catching up with e-learning: implications for education and social policy. Retrieved December 28, 2003, from http://www.col.org/speeches/AMIC_01.htm

Merriam, S. B. & Simpson, E. L. (1995). *A guide to research for educators and trainers of adults.* (2nd ed. updated) Malabar, Florida: Krieger Publishing Company.

Moore, M. G. (1994). Administrative barriers to adoption of distance education. *The American Journal of Distance Education,* 8(3).

Muilenburg, L. Y. & Berge, Z. L. (2001). Barriers to distance education: A factor-analytic study. *The American Journal of Distance Education.* 15(2): 7-22. Retrieved July 9, 2003, from http://www.emoderators.com/zberge/fa_ajde_050401.shtml.

Olcott, D. & Schmidt, K. (2000). Redefining faculty policies and practices for the knowledge age. In D. Hanna, (Ed.), *Higher education in an era of digital competition: Choices and challenges* (pp. 259 – 285. Madison, WI: Atwood Publishing.

O'Quinn, L. & Corry, M. (2002). Factors that deter faculty from participating in distance education. *Online Journal of Distance Learning Administration,* Vol. V, 1, Spring 2002. Retrieved February 24, 2004, from http://www.westga.edu/~distance/ojdla/winter54/Quinn54.html.

Pajo, K. & Wallace, C. (2001). Barriers to the uptake of web-based technology by university teachers. *Journal of Distance Education.* Spring/Printemps 2001, 16, 1, 70-84.

Parker, A. (2003). Motivation and incentives for distance faculty. *Online Journal of Distance Learning Administration,* Vol. VI, 3, Fall 2003. Retrieved October 9, 2004, from http://westga.edu/~distance/ojdla/fall63/parker63.htm.

Patton, M. D. (2001). *Qualitative research and evaluation methods..* Thousand Oaks, CA: Sage Publications.

Paul, R. H. (2003). Institutional leadership and the management of change. In S. Panda (Ed.), *Planning and management in open and distance education* (pp. 75 – 85). Sterling, VA: Kogan Page Limited.

Rockwell, S. K., Schauer, J., Fritz, S. M. & Marx, D. B. (1999). Incentives and obstacles influencing higher education faculty and administrators to teach via distance. *Online Journal of Distance Learning Administration*, Vol. II, Number IIII, Winter 1999. Retrieved February 28, 2004 from http://westga.edu/~distance/rockwell24.html.

Schreiber, D. A., & Berge, Z. A. (1998).*Distance Training. How innovative organizations are using technology to maximize learning and meet business objectives.* San Francisco, CA: Jossey-Bass Publishers.

Seels, B. B. & Richey, R. C. (1994). *Instructional technology: The definition and domains of the field.* Washington, DC: Association for Educational Communications and Technology.

Senge, P. (1995). On schools as learning organizations: A conversation with Peter Senge. *Educational Leadership*. April 1995, 52, 7, 20-23.

APPENDIX A

Letter of Consent to Potential Participants

May ____ , 2004.

Dear _____

As you may know, I am presently completing my Master of Education through the Department of Educational Psychology at the University of Alberta. Through my thesis, I want to explore the institution's and faculty's level of preparedness for change as a response to e-learning. Please note that my thesis will be a qualitative research which will be reported as an interpretive case study.

I am seeking volunteers for my research, and I believe you are a good candidate and a good source of information. My intentions are to interview senior administrators and faculty involved in e-learning as well as faculty who are not involved in this kind of activity. My interactions with you, if you elect to participate, will be limited to interviews.

If you agree to participate in this research, your participation must be voluntary. Should you decide to discontinue your participation in this research, you will be free to withdraw your consent at any time without any penalty or harm.

If you decide to participate in this research, the following events will take place:

a) I will interview you in your office for 45 minutes during your regular work hours on two separate occasions. Our interviews will be recorded on cassettes which I will personally transcribe. If necessary, short follow-up interviews may be requested of you to clarify points and to check the accuracy of our interview transcripts. I anticipate that all interviews will take place between April and June of 2004.

b) I undertake to maintain the confidentiality of our discussions. To ensure confidentiality, the cassettes and the transcriptions will be kept under lock and key in my home office. Both the transcriptions and the cassettes will be destroyed after five years.

APPENDIX B

Sample of Faculty Questions

1. How long have you been working at COTR? (include part-time employment)

2. If your department is involved in online delivery when did your department/program begin offering online courses?

3. If your program offers courses online, why did your department begin the process of offering online courses? If not, could you tell me some of the reasons why this delivery method is not part of your regular course delivery?

4. What were the primary and secondary reasons for faculty to decide to go online or not to go online?

5. What factors most influenced you and your colleagues to go online or not to go online?

6. Some time ago, the College decided to increase its delivery of online courses (double in two years and double again in five years). Were the College's plans to offer online courses well publicized? Who was the primary speaker? Who else from the College presented a strong case for your department to move to online delivery?

7. Do you know if the institution has revised its mission, goals, and strategies to align with new technological delivery methods? When and are they widely published?

8. Do you know if there is a formal process for determining our e-learning rationale?

9. Do you know if the institution's goals are aligned with student and faculty needs?

10. In your view, does the financial plan include budgets for additional faculty professional development?

11. In terms of technology, is the college's technical infrastructure such that upcoming changes to technology can be easily integrated within the current infrastructure?

12. From your perspective, is faculty empowered to play a key role in the decision-making process surrounding the change toward e-learning?

13. Do you know if e-learning has changed the college's business plan and if e-learning part is of the strategic goals? Explain.

14. Do you believe that the institution will be able to sustain e-learning? As is? With growth?

15. Does e-learning directly support the core business of the College?

16. Change at the institutional level requires a lot of energy. How quickly can the organization respond to change?

17. How do you foresee e-learning growing at the college in the next 5 years?

18. Were you involved or do you want to be involved in policy regarding e-learning initiatives?

19. Training in educational technology is required to develop online courses. Have faculty received and will they continue to receive formal training in e-learning to develop online courses?

20. Quality is a key word at COTR. Is the institution promoting and reinforcing quality issues in online courses? How?

21. Are there champions in administration and faculty to support e-learning?

22. From your perspective, does the college understand and support through release time and funding the need for continual updating (maintenance) of online courses?

23. Are rewards given to faculty who deliver online courses?

24. Are the hardware and software used by faculty current and powerful enough to handle the demands associated with e-learning?

25. In your view, is the college keeping up to date with technological changes?

26. What are the strengths and weaknesses of the college's technology to support ongoing e-learning initiatives?

27. Based on history of the college, how do faculty respond to change?

    a) embrace change
    b) after reasonable time they embrace change
    c) considerable resistance to change
    d) give lip service but continue with business as usual.

28. When the college receives feedback, be it solicited or unsolicited, what is the typical response?

    a) appreciation and action
    b) appreciation but no action
    c) ambivalence
    d) defensiveness and denial.

29. Which of the following statement best describes e-learning at this institution?

    a) keeps current with teaching and learning development and is progressive
    b) slowly transforming into a high quality deliverer of online courses
    c) adaptation of face-to-face courses into online courses is viewed as good for the college and for the students
    d) a place where one can take risks and can express opinions without fear.

30. How would you characterize the attitude of the majority of faculty to e-learning initiatives?

    a) involved in the planning and design and are eager to see it to completion
    b) understand and support e-learning
    c) consider e-learning to be an important way of delivering education to regional students
    d) not comfortable with e-learning
    e) Resistant to e-learning and don't consider this delivery method to be an acceptable way of delivering education.

31. Which of the following best characterizes senior management's and faculty's attitude towards e-learning?

    a) very enthusiastic
    b) enthusiastic
    c) ambivalent
    d) uninterested
    e) very uninterested.

32. In your view, are faculty ready to change as a response to e-learning?

33. In your view, is the institution ready to change as a response to e-learning?

Sample of Administrator Questions

1. How long have you been working at COTR? As a dean?

2. When did the college begin offering online courses and what factors most influenced the college's decision to move to this delivery mode?

3. In your opinion, what were and are the primary reasons for faculty to decide to a) go online or b) not to go online?

4. In 2002, the College decided to increase its online delivery (double in two years and double again in five years). Were the College's plans to offer online courses well publicized? Who from the College presented a strong case to move to online delivery?

5. In light of our online delivery, has the institution revised its mission, goals, and strategies to align with new technological delivery methods? When and are they widely published?

6. Does e-learning directly support the core business of the College?

7. Has e-learning changed the college's business plan and is e-learning part of the strategic goals? Explain.

8. Can you tell me a little bit about the formal process for determining our e-learning rationale?

9. In your view, are the institution's goals aligned with student and faculty needs? Explain.

10. Can you tell me if the college's financial plans include budgets for additional faculty training for new faculty or faculty who decide to go online?

11. From your perspective, is faculty empowered to play a key role in the decision-making process surrounding the change toward e-learning?

12. Do you believe that the institution will be able to sustain e-learning? As is? With growth?

13. Change at the institutional level requires a lot of energy. How quickly can the organization respond to change?

14. How do you foresee e-learning growing at the college in the next 5 years?

15. Training in educational technology is required to develop online courses. Have faculty received and will they continue to receive formal training in e-learning to develop online courses?

16. Quality is a key word at COTR. Is the institution promoting and reinforcing quality issues in online courses? How?

17. Are there champions in administration and faculty to support e-learning?

18. From your perspective, does the college support through release time and funding the need for continual updating and maintenance of online courses?

19. Are rewards given to faculty who deliver online courses? What are they?

20. In terms of technology, is the college's technical infrastructure such that upcoming changes to technology can be easily integrated within the current infrastructure?

20. Are the hardware and software used by faculty current and powerful enough to handle the demands associated with e-learning?

21. In your view, is the college keeping up to date with technological changes?

22. What are the strengths and weaknesses of the college's technology to support ongoing e-learning initiatives?

23. Based on history of the college, how do faculty respond to change?

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26. How would you characterize the attitude of the majority of faculty to e-learning initiatives?

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    a) very enthusiastic
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    e) very uninterested.

28. In your view, are faculty ready to change as a response to e-learning?

29. In your view, is the institution ready to change as a response to e-learning?